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RESULTS

OF

METEOROLOGICAL OBSERVATIONS

MADE AT THE

MAGNETICAL OBSERVATORY, TORONTO,

CANADA WEST,

DURING THE YEARS 1860, 1861, & 1862.

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INTRODUCTION.

THE Toronto Magnetical and Meteorological Observatory is situated in the grounds of the University of Toronto, in latitude 43° 39′.4 N., longitude $5^h\ 17^m\ 33^s$ W., 108 feet above Lake Ontario, and approximately 342 feet above the level of the sea.

The circumstances attending the establishment of the Observatory by the British Government in 1839-'40, and its transfer to the care of the Provincial Government in 1853, have been described in the introduction to the "Results of Meteorological Observations for the years 1854-'59."

The duties of the Observatory are carried on by the Director, G. T. Kingston, M.A., assisted by Messrs. Walker, Menzies, and Stewart, formerly non-commissioned officers of the Royal Artillery, and observers under the Imperial Government, together with Mr. W. F. Davidson, an additional observer who has been connected with the establishment since the commencement of 1857.

The instruments and the system of observation during the years 1860-'62 continued the same as in the previous years. The regular observation hours for reading the barometer, standard thermometer, and wet-bulb thermometer were 6 A.M., 8 A.M., 2 P.M., 4 P.M., 10 P.M., and midnight; excepting on Sundays, Christmas Day, and Good Friday, when these instruments were read at 6 A.M. and 2 P.M. only. These latter readings, though recorded in the daily register, are not included in the hourly means of the month. The hygrometric tables employed for deducing the pressure of vapour and the relative humidity were those calculated by Professor Coffin, of Lafayette College, Pennsylvania, from the more recent experiments of Regnault. The differences between the barometric pressures and the pressures of vapour have been recorded, in conformity with ordinary usage, as the "Pressures of Dry Air."

At the regular observation hours a record was always made of the general appearance of the sky, including the form, distribution, and motions of the clouds.

The maximum self-registering thermometer was read at 6 A.M., the reading being entered for the meteorological day which terminates at that hour. The minimum self-registering thermometer was read at 2 P.M., the entry being made as belonging to the actual day.

From Robinson's anemometer a continuous record was kept of the direction of the wind during each hour of every day, (Sundays and holidays included,) and its mean velocity, or number of miles passed over by the wind during the hour, the space of each hour being always designated by the point of time with which it commenced. For each of the six observation hours, the instantaneous direction and approximate velocity at the hour were also recorded, such velocity being the distance travelled by the wind during the half-hours preceding and following the hour of observation.

The resultant direction and resultant velocity for any day or other group of hours were calculated from the directions and velocities in the several hours composing the group, by means of the formulæ

$$\tan \bar{\theta} = \frac{\Sigma\,(\mathrm{V} \sin \theta)}{\Sigma\,(\mathrm{V} \cos \theta)}; \qquad \bar{\mathrm{V}} = \frac{\Sigma\,(\mathrm{V} \cos \theta)}{n \cos \bar{\theta}};$$

where θ represents the angular distance of the point from which the wind blew during any hour, measured from the north towards the right, V the corresponding velocity, $\bar{\theta}$ and $\bar{\mathrm{V}}$ the values of θ and V corresponding to the resultant, and n the number of hours in the group under consideration.

The depth of rain or snow recorded for any day was that which fell between 6 A.M. that commenced and 6 A.M. that terminated the day in question.

The rain-gauge in ordinary use gives only the amount of rain that falls between two successive examinations, and therefore affords no means of determining the distribution of the rain among the several hours of the day. To supply this defect, an hourly rain-gauge, of which the following is a description, was constructed and brought into use in April, 1861.

The rain is received, in the first instance, by an ordinary gauge placed on the summit of a chimney, with its orifice at a height of 19 feet above the ground, and sufficiently removed from the influence of eddy winds. The rain is thence conveyed by a pipe into the room beneath, where it is discharged into a small copper cylinder, two inches in diameter, which, by means of a band connected with a clock, is made to revolve about its axis, placed vertically, once in twenty-four hours. From the lower part of the copper cylinder a tube extends slightly inclining outwards from the horizontal, whose outer extremity, bent downwards, is directed successively into twenty-four equal compartments of a large zinc vessel, bounded by two cylindrical surfaces, whose common axis coincides with that of the small copper distributing cylinder. The diameters of the bounding cylindrical surfaces of the vessel are 32 inches and 20 inches respectively, and its height 14 inches. The compartments are separated by thin vertical partitions radiating from the common axis, and are each furnished with a small discharge pipe by which the rain may be drawn off and measured at the convenience of the observer. By this arrangement a record can be made of the depth of rain that falls within each separate hour as long as the instrument is in operation. The time of its action however is limited, to those parts of the year when severe frosts are not likely to occur, namely, from April to October, inclusive, with sometimes a portion of November.

General Meteorological Register.

In the monthly abstracts on pp. 1 to 36, the numbers entered in the six columns headed "Daily Means," are the daily averages of the observations made at the six observation hours, and are uncorrected for diurnal variation. The resultant directions and velocities and the mean velocities of the wind are derived from the directions and velocities during each of the twenty-four hours. The numbers at the bases of the columns of daily means, as well as those of the mean velocities of the wind and the extremes of temperature, are the averages of the numbers under which they stand, Sundays and other holidays being excluded only in the first six columns. Under the columns containing the daily resultant directions and velocities of the wind, are placed the monthly resultant direction and resultant velocity, and under the columns for the rain and snow, are entered the sums of the numbers which these columns respectively contain. In the rain or snow columns the occurrence of a star (*) indicates that the amount was too small for measurement, or the duration less than half an hour. In the column for rain and melted snow combined, ten inches of snow are reckoned as equivalent to one inch of rain.

REMARKS ON THE TABLES.

Temperature Tables.

The normals referred to in the temperature tables (Tables I. to XV.) are the normal temperatures proper to Toronto in its actual circumstances. They have been deduced from the table of twenty-four-hour daily means (a) given by General Sabine in his paper on the periodic and non-periodic variations of temperature at Toronto, by applying the diurnal variations (b) contained (*though with contrary signs,*) in the same paper. The normals, thus computed, are used as standards of reference, the abnormal variations being entered in the daily register side by side with the several observed temperatures.

Table I. gives the monthly means of the temperature of the air at each of the six observation hours in the three years, 1860, 1861, and 1862. The numbers in the final column of each month are the means of those in the six preceding columns, uncorrected for diurnal variation.

The final columns of the several monthly parts of Table I. are exhibited in one view in Table II., which gives the monthly and annual means of temperature furnished by six daily observations for each of the three years, together with the averages of the monthly and annual means for the three years. For the purpose of comparison, the normal monthly means derived from the same six observation hours are also introduced, together with the monthly and annual means for the period 1854 to 1859.

The numbers at the foot of each of the monthly parts of Table I. are collected in Table III. which shews, on the average of the three years, 1860 to 1862, the monthly means of temperature at each of the six observation hours.

From Table IV. it appears, from the observations of nine years, that the observed temperature is in excess or defect from the normal proper to the day and hour by a difference whose mean value is 6°.5. This abnormal digression has an annual period, being greater in the cold and less in the warm months, its value in February being about twice as great as in August. The quarterly averages in the two series are as follows:

	Winter.	Spring.	Summer.	Autumn.
1860–62 ……	8°.5	6°.0	4°.6	5°.5
1854–59 ……	9.4	6.2	5.2	5.9
1854–62 ……	9.1	6.1	5.0	5.8

In Table V. a comparison is made for each month between the abnormal digressions of temperature, without regard to sign, at the six observation hours.

(a) Philosophical Transactions for 1853, pp. 154, 159. (b) Philosophical Transactions for 1853, pp. 145, 146.

Having regard to the annual means alone, there appears in both series to be but little difference between the abnormal digressions at the different hours, the greatest difference being only 0°.4 in the earlier and 0°.3 in the later series; an excess as compared with other hours occurring, in both series, at 6 A.M. The observations of the years 1860–'62 corroborate the statement made in the preceding volume respecting an annual period in the position of the hours of greater abnormal digression. The variations at 10^h, 12^h, 18^h, and 20^h, in the six winter months, (October to March) are found in most instances to be greater, number for number, than at 2^h and 4^h; while in the six summer months this relation is reversed. From the comparison of the half-yearly means at each hour and for the two groups of hours given in Table VI., there appears in both series to be in winter a greater uncertainty respecting the temperature during the night and morning than during the hours of the day, whereas in summer the warmer hours are more subject to irregularity. In other words, the warm hours are most liable to disturbances of temperature in the warm months, and the cold hours in the cold months; the differences between the average extent of a disturbance (if it be so called) in the two groups of hours being about 0°.8 in both half-years.

It has been seen in the two preceding tables that the average abnormal digressions of the observed temperatures, considered singly, are systematically greater, for a given month, at certain hours, and that the hours of greater digression have themselves an annual periodic movement. This circumstance suggests the enquiry whether the digressions of the monthly means in *single years* from the means derived from a series of years are affected by changes of a like periodic character. With a view to this question Table VII. has been formed, giving the probable variability of the monthly means for each month, and for each of the six observation hours. The number expressing the probable variability for any month and hour was computed from the squares of the differences between the means for that month and hour in each single year, from 1854 to 1862, and the mean for the same month and hour on the average of the nine years. The three final columns contain the half-yearly and yearly averages of the variabilities for each of the six hours, and the three lowest lines give the monthly, half-yearly, and yearly averages of the variabilities for 2^h and 4^h, for 10^h to 20^h, and for the six hours collectively.

In the diurnal period the progression is regular on the average of the year, as well as in each half-year. For the whole-year 2 P.M. is the most variable hour with respect to its monthly means, and 10 P.M. the most regular hour. In the summer half-year 2 P.M. is also the most variable hour, but the most regular hour is midnight, while in the winter half-year the most variable hour is 6 A.M. and the most regular hour 4 P.M.

With respect to the annual period the average variability in the six winter months is about 50 per cent. greater than in the summer months; the average variability also at 2^h and 4^h, namely, at the warmer hours, is greater in each of the six summer months than the average variability at the hours 10^h, 12^h, 18^h, and 20^h. The reverse of this takes place in January, February, and March, but not in October, November, and December, when the variability is very slightly in excess at the warmer hours. But comparing the winter and summer averages for the above named combinations of hours, it is found, as in the case of the abnormal variations, that in the warm months the temperature is most variable at the warm hours, and that in the cold months the temperature at the colder hours is most variable.

The resemblance, with respect to the relation just described, between the abnormal variations of single observations and the probable variability of monthly means in a single year, is best seen by placing the results together as follows:

	Mean Abnormal Variation.			Probable Variability.		
	2^h and 4^h		10^h … 20^h	2^h and 4^h		10^h … 20^h
Winter …………	7°.22	<	7°.99	2°.41	<	2°.69
Summer…………	5.84	>	5.01	1.99	>	1.48
Year ……………	6.50	>	6.50	2.20	>	2.08

In Tables VIII. and IX. the abnormal variations of temperature, with their proper signs, are arranged according to the eight principal points of the direction of the wind. In Table VIII. the half-yearly and yearly means are given for the three years separately as well as collectively. It is seen that with a N.E. wind and a west wind the temperature was above the normal in some half-years and below it in others, without reference to the season; with east and S.E. winds the temperature was above the normal in each winter and below the normal in each summer, and with winds from S. and S.W. the temperature was above the normal in each separate half-year.

Table IX. gives the monthly and yearly means of the abnormal digressions of temperature for the several winds, on the average of the three years, together with the yearly means from 1853 to 1859. The variations which accompany the N.E. and west winds have different signs in the two series. This contrariety of sign is partly occasioned by the proximity of these points to the line, which, in the earlier series, was found to separate the relatively warm from the relatively cold winds. Another cause of this disagreement is the fact that many winds which were considered, in the later series, as belonging to the N.E. group, blew from points that were included in the N.N.E. and E.N.E. groups in the earlier series. A similar remark is applicable to the west winds.

In Table X. a classification has been made of the larger deviations of temperature, including all those cases during the ten years, 1853 to 1862, wherein the observed temperature differed to the extent of 15° and upwards from the normal proper to the day and hour. It will be seen, taking one month with another, that the excessively low temperatures are more than twice as numerous, as well as of greater average deviation, than those which are relatively high.

The general excess in the number of low temperatures is due to their large preponderance in the winter months; for in summer and autumn the high temperatures exceed in number the low temperatures. The quarterly and annual numbers, and average extent of the extraordinary deviations, of both signs, as well as when considered without regard to sign, are as follows:

		Winter.	Spring.	Summer.	Autumn.	Year.
High temperatures	—Number ……………	176	91	68	110	445
	Average deviation…	18°.2	17°.6	16°.7	18°.9	18°.0
Low temperatures	—Number ……………	645	184	29	52	910
	Average deviation…	21°.9	19°.6	17°.0	17°.7	21°.0
Both signs ………	—Number ……… ……	821	275	97	162	1355
	Average deviation…	21°.1	18°.9	16°.8	18°.5	20°.0

In Table XI. the temperatures that exceeded the normal to the extent of 15° and upwards during the ten years, 1853 to 1862, are classified according to the simultaneous direction of the wind.

In the four columns marked (1) are entered, for each of the four seasons, the absolute number of times that each wind accompanied an excessively high temperature. Now as some winds, other things being the same, are more numerous than others, it is necessary that the numbers in (1) should be divided by numbers proportional to the relative frequency of the several winds, without reference to temperature, during the same period of ten years. The requisite divisors, derived from Table LXVI.,* are contained in the four columns marked (2). The quotients arising from the division of the numbers in (1) by those in (2), and which are entered in (3), are expressed severally in terms of their respective means for all winds in column (4).

The cases embraced in the ten years are not sufficiently numerous to yield very decided results; but as far as they go, they shew that with excessively high temperatures the south and S.S E. winds are most frequent in winter, the S.S.W. and S.W. winds in spring and autumn, while in summer the west and W.S.W. winds most commonly accompany the excessively high temperatures.

Table XII. shews the results similarly obtained for the excessively low temperatures.

In Table XIII. are given, for each month and for each of the three years, the mean changes in the temperature, without regard to sign, that take place in 24 hours, between 6 A.M. and 6 A.M. on consecutive days. Taking the three years together, the average change of temperature in 24 hours is 6°.1, the greatest change (9°.6,) occurring in February, and the least (4°.1,) in July. The quarterly means for the nine years, 1854 to 1862, are 9°.13 in winter, 5°.27 in spring, 4°.07 in summer, and 6°.50 in autumn; the general annual mean for the nine years being 6°.25.

In Table XIV. the mean diurnal changes of temperature, with their proper signs, are arranged according to the resultant direction of the wind during the day in which the change took place.

It is seen that with a resultant wind from N.W. or W., the temperature is lowered in every month, and that with a resultant wind from any other point the temperature is raised on the average of the year as well as in most months separately. The exceptions may be traced to the circumstance that the resultants in certain directions are not sufficiently numerous in some months to allow the effect of accidental anomalies to be overpowered and rendered inappreciable.

In Table XV. the highest and lowest temperatures that occurred in each month are given for each year separately, as well as for the average of the three years, 1860 to 1862, accompanied by the corresponding averages for the six previous years, 1854 to 1859.

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*TABLE LXVI.

Relative frequency of the several winds, including calms, in each of the four quarters, for the period 1853-'62—(*See pages* XVI. *and* 65.)

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N W.	N.W.	N.N.W.	Calms.
WINTER	1.18	0.88	0.87	0.75	0.85	0.40	0.23	0.24	0.24	0.71	1.46	2.29	1.97	1.31	1.28	1.40	0.99
SPRING.....	1.03	0.63	0.76	1.45	1.73	0.75	0.47	0.42	0.66	1.01	0.88	0.79	1.18	1.45	1.54	1.51	0.79
SUMMER............	1.01	0.67	0.62	0.98	1.34	0.78	0.58	0.72	1.29	1.58	0.97	0.57	0.79	1.06	1.41	1.57	1.11
AUTUMN............	1.07	0.77	0.77	1.02	1.13	0.56	0.42	0.48	0.74	1.14	1.15	1.23	1.26	1.37	1.21	1.25	1.48

Barometric Tables.

The means or approximate normals employed as standards of comparison in the barometric tables (Tables XVI. to XXVI.) are the hourly means in each month, derived from the observations of eighteen years.

Table XVI. gives the monthly means of the barometer corrected to temperature 32° Faht., at each of the six observation hours, in the years 1860, '61, and '62. The final columns of each monthly part of this table, which contain the means of the six preceding columns, are exhibited in one view by Table XVII; while in Table XVIII. are collected the hourly means at the foot of each monthly part of Table XVI.

Table XIX. shews the monthly averages of the extent of the barometric abnormal oscillations. The numbers whose averages are given in this table are the differences, without regard to sign, between the observed height of the barometer and the assumed normal proper to the month and hour.

The annual distribution is in general accordance with that given in the comparative table for the period 1854 to 1859, the quarterly means for the two series being as follows:

	Spring.	Summer.	Autumn.	Winter.
1860–62	0.191	0.128	0.175	0.234
1854–59	0.190	0.122	0.191	0.230
1854–62	0.190	0.124	0.186	0.231

It thence appears that the extent of the barometric oscillations in winter is nearly twice as great as in summer, and that in the spring and autumn the oscillations are nearly equal.

In Table XX. are exhibited the mean abnormal variations of the barometric pressure in the different hours. On the average of the year, although the range in the extent of the abnormal digressions is small the progression is regular for the three years, 1860–'62, as well as for the six preceding years; the most disturbed hour being 8 A.M. and the most tranquil hour 10 P.M. A somewhat similar conclusion results from Table XXI., in which is given, for each month and hour, the probable variability of an hourly mean in a single year, computed from the squares of the differences between the hourly means of any month in each year, from 1854 to 1862, and the average for the same hour and month derived from nine years. By comparing the quarterly and yearly means of the numbers in Table XXI. with those of the abnormal variations for the same nine years, it is seen that the progression, as respects the hours of greater and less barometric disturbance, unlike that which has been noticed with regard to the disturbances of temperature, is not subject to any well marked change of character in the different seasons. The quarterly and yearly means are contained in the annexed table.

	MEAN ABNORMAL VARIATIONS.					MEANS OF PROBABLE VARIABILITIES.				
	Quarters.					Quarters.				
h	Winter.	Spring.	Summer.	Autumn.	Year.	Winter.	Spring.	Summer.	Autumn.	Year.
2	.236	.194	.127	.188	.186	.0382	.0416	.0311	.0394	.0376
4	.232	.189	.122	.182	.181	.0366	.0409	.0299	.0381	.0364
10	.226	.182	.115	.181	.176	.0348	.0391	.0294	.0389	.0355
12	.226	.184	.116	.184	.177	.0348	.0396	.0294	.0401	.0360
18	.233	.194	.131	.189	.187	.0408	.0426	.0337	.0407	.0395
20	.235	.199	.130	.192	.189	.0415	.0432	.0332	.0402	.0395

Tables XXII. and XXIII. give the mean abnormal variations of the barometer that accompany winds from the eight principal points.

From comparing the yearly means derived from the three years, 1860-'62, with those for the seven years, 1853-'59, it appears that the general character of the two results are the same, and the means nearly identical in some cases. In both series the barometer is above the normal when the wind is from N., N.E., E., S.E., and S., and below the normal when the wind is from S.W., W., and N.W.; the greatest elevation accompanying a north wind and the greatest depression occurring with a S.W. wind. The half-yearly means shew, as far as the observations of three years are competent to shew it, that the south wind accompanies a low barometer in winter and a high barometer in summer, and that the reverse is the case with the N.W. wind. In judging of the resemblance between the earlier and later series, it is to be remembered that in the more recent series, many winds are included among the eight principal points, which, for the series 1853-'59, were reckoned as belonging to the intermediate points.

Tables XXIV. and XXV. are derived from the differences between the corrected readings of the barometer at 6 A.M. on consecutive days, Sundays and other holidays being included. The results in Table XXIV. are obtained by dividing the aggregate change, without regard to sign, in each month by the number of changes, *i. e.* by the number of days in the month.

The correspondence in the two series is on the whole tolerably close, the maximum occurring in either January or February, and the minimum in either July or August. Combining the two series, the greatest monthly average change in twenty-four hours is 0.281 in January, and the least 0.121 in July, the annual mean being 0.198. The quarterly means are as follows:

	Winter.	Spring.	Summer.	Autumn.
1860 to 1862	0.273	0.197	0.137	0.192
1854 to 1859	0.269	0.211	0.121	0.189
1854 to 1862	0.270	0.206	0.126	0.190

In Table XXV. are given the quotients arising from the division of the algebraical sum of the changes that accompanied each resultant wind by the number of the resultant winds in the same month and direction. The numbers in the final column are derived from the sums and numbers of the changes corresponding to each wind, and will not therefore be generally equal to the arithmetic means of the numbers in the monthly columns. From both series it is seen that the barometer rises on the average of the year when the resultant wind is from N., N.W., and W., and that it falls with a resultant wind from other quarters. It is also found, both from Table XXV. and the analogous table in the volume for 1854-59, that these statements hold good in nearly every month taken separately. A comparison of the signs of Tables XXV. and XXIII. corresponding to the several winds, brings out the fact that the same winds that accompany a relatively *high* barometer are for the most part those that, as resultants, accompany a fall; and that the winds that correspond to a low barometer commonly accompany a rise.

TABLES RELATIVE TO THE PRESSURE OF DRY AIR—(TABLES XXVII. TO XXXVI).

The approximate normals of reference for the pressure of dry air are the hourly means in each month on the average of eighteen years.

Table XXVII. gives the monthly means of the pressure of dry air at each of the six observation hours in the years 1860, 1861, and 1862. The final columns of each monthly part are collected in Table XXVIII., and the lowest horizontal lines in Table XXIX.

Tables XXX. and XXXI. give, for each month and for each of the six observation hours, the mean abnormal variations of the pressure of dry air.

The following are the quarterly means of the abnormal variations of the pressure of dry air, together with those of the barometric pressure; both being derived from the same three years:

	Spring.	Summer.	Autumn.	Winter.	Year.
Dry Air........	0.215	0.184	0.211	0.258	0.217
Barometer......	0.191	0.128	0.175	0.233	0.183

The maxima and minima are as follows:

	Maxima.	Minima.
Dry Air........	0.282 in December;	0.167 in July;
Barometer......	0.257 in December;	0.144 in August.

From Table XXXI. a faint trace of a diurnal period is observable, ~~better~~ less marked in winter than in summer, the mean digression on the average of the year being slightly less at 10 P.M. than at 2 P.M. and the morning hours. The following are the half-yearly and yearly means of the abnormal variations, without regard to sign, at the different hours.

	h 2	h 4	h 10	h 12	h 18	h 20
Winter	0.241	0.237	0.237	0.237	0.241	0.242
Summer......	0.198	0.197	0.188	0.190	0.198	0.196
Year	0.220	0.217	0.213	0.213	0.219	0.219

In Tables XXXII. and XXXIII. the abnormal variations, with their proper signs, are arranged according to the simultaneous direction of the wind.

From Table XXXII. it is seen that the pressure of dry air, as in the case of the barometer, is above the normal with the wind from N. and N.E. in both half-years, and below the normal with a wind from S.W. or W.; it is also above the normal in summer and below it in winter with a south wind. Unlike the total barometric pressure however, the pressure of dry air is above the normal in both seasons with a N.W. wind; and while in both seasons, with S.E. and E. winds, the barometer is above the normal, the pressure of dry air, though above the normal on the average of the year, is below the normal in winter. The annual means have the same signs as those for the total pressure, excepting that the pressure of dry air with a N.W. wind is decidedly above the normal, and with a south wind slightly below it.

In Table XXXIV. are exhibited the monthly and annual means of the changes in the pressure of dry air that take place in the 24 hours, commencing and ending with 6 A.M. The average changes in the four quarters and year, together with the corresponding averages of the total pressure, are given herewith:

	Spring.	Summer.	Autumn.	Winter.	Year.
Dry Air........	0.228	0.207	0.237	0.302	0.243
Barometer......	0.197	0.137	0.192	0.273	0.199

Hence while the average change in the pressure of dry air, in the different seasons, follows the same order of progression as that of the barometer, its changes are considerably greater. The range, or ratio of the winter to the summer change, is greater for the barometer than for the dry air, the ratios being respectively 1.99 and 1.46.

From Table XXXV., in which the average changes of the pressure of dry air in twenty-four hours, with their proper signs, are arranged according to the daily resultant direction of the wind, we find, on the average of the year, that the pressure increases in twenty-four hours with a resultant wind from N., N.W., and W., and decreases with a resultant wind from any other quarter. It appears further, that with eight exceptions only out of the ninety-six cases, this holds good for each separate month. The greatest rise on the average of the year occurs with a N.W. resultant, and the greatest fall with one from S.E., the range amounting to 0.491.

TABLES RELATIVE TO THE PRESSURE OF VAPOUR—(XXXVII. TO XLVI.)

The approximate normals referred to in the tables that follow are the monthly means at the six observation hours, derived from the records of eighteen years.

In Table XXXVII. are given the monthly means of the pressure of vapour at each observation hour for each of the three years, 1860, 1861, and 1862. The monthly means, on the average of the six hours, are given for each year in Table XXXVIII., and the monthly means at each hour on the average of the three years in Table XXXIX.

Table XL. exhibits the means of the abnormal variations of the pressure of vapour, without regard to sign, for each month in each of the years, 1860, '61, and '62, as well as on the average of the same three years. The greatest monthly mean digression, 0.099, is in August, and the least, 0.040, occurs both in January and in March. The transition from month to month is not perfectly regular, but it follows in the main the annual variation of the pressure of vapour. The general similarity in the annual fluctuations of the average amount of the pressure of vapour, and of its abnormal variations, will be seen by the annexed table, from which also it appears that the irregular variation averages about one-fourth of the whole pressure of vapour.

	Spring.	Summer.	Autumn.	Winter.	Year.
Pressure of Vapour.........	0.200	0.441	0.285	0.119	0.261
Abnormal Variations	0.055	0.090	0.071	0.043	0.065

It may be noticed further, that the digressions in the amount of vapour, *as compared with the whole amount*, are least in summer when the whole amount is greatest, and greatest in winter when the whole amount is least.

Table XLI. shews the monthly and annual means of the abnormal variation of the pressure of vapour at each observation hour for the period 1860 to 1862. On the average of the year the abnormal digression is greatest at 2 P.M. and least at 6 A.M., which are respectively the hours of greatest and least pressure of vapour among the six hours of observation.

The mean extent of the abnormal variations at 2^h P.M. and 4^h P.M. will be found to be greater than at the other hours in every month but January and February, and in every quarter but the winter. By comparing the annual means of the abnormal variations at the six different hours with the annual means of the pressure of vapour at the same hours, as shewn together in the annexed table, it appears that the former are nearly one-fourth of the latter.

	2^h	4^h	10^h	12^h	18^h	20^h
Pressure of Vapour......	0.280	0.275	0.256	0.250	0.247	0.261
Abnormal Variations....	0.071	0.070	0.064	0.063	0.061	0.062

In Tables XLII. and XLIII. the mean abnormal variations of the pressure of vapour, with their proper signs, are arranged according to the simultaneous direction of the wind.

From Table XLII. it appears that the pressure of vapour is below the normal with a wind from N., N.W., and W., on the average of the year and for both half-years, and that this is true for each year taken singly. With a wind from any other quarter the pressure of vapour is above the normal on the average of the three years, as well as on the average of the three winters; this, excepting as regards the N.E. wind in 1862, being also true for each separate year. With winds from N.E., E., and S.E., the pressure of vapour during the summer half-year is sometimes above and sometimes below the normal. On the average of the year the pressure is greatest with a wind from S.W., and least with a wind from N.W. In both seasons the least vapour occurs with a wind from N.W., but in winter the largest amount of vapour is with a wind from the S.E., a quarter which in summer is accompanied by an amount of vapour below the average.

From Table XLIII. wherein the mean differences above or below the normal with different winds are given for every month, it is seen that the pressure of vapour is below the normal with a wind from N., N. W., and W., in every month, with one exception for the north wind and one exception for west. With winds from other points the pressure is above the normal in most months, seventeen exceptions occurring among the sixty monthly means for the said five winds.

The mean changes in the pressure of vapour between 6 A.M. and 6 A.M, on consecutive days, and without regard to sign, are given for each month and year in Table XLIV. The average change for the year is 0.060, the greatest change being 0.093 in September, and the least 0.038 in January. The quarterly means are:

Spring.	Summer.	Autumn.	Winter.
0.044	0.087	0.067	0.042

It may be seen from Table XLV., which gives the mean changes, with their proper signs arranged according to the resultant direction of the wind, that on the average of the year, as well as in each separate month, with one exception only out of the thirty-six cases, the vapour diminishes in twenty-four hours with a resultant wind from N., N.W., and N. With a resultant wind from any other quarter the vapour increases on the average of the year as well as in each separate month, with nine exceptions out of the sixty cases. The greatest increase +0.085 is with a S.E. resultant, and the greatest decrease —0.044 with a resultant from N.W.

RELATIVE HUMIDITY—(TABLES XLVII. TO LV.)

The approximate normals with which the humidity at observation is compared, are the monthly means at each observation hour derived from the records of eighteen years.

In Table XLVII. the monthly means are given for each hour and for each of the three years. The six-hour means for each of the three years are shewn in Table XLVIII., and the three-year means at each observation hour in Table XLIX.

The abnormal variations without regard to sign, as given in Table L., are greatest in June, on the average of the three years, and least in December and January. The quarterly averages given in the annexed table, wherein saturation is expressed by 100, shew however that the greatest irregularity occurs in spring and the least in winter.

Spring.	Summer.	Autumn.	Winter.	Year.
11.0	10.0	8.3	8.2	9.4

In the diurnal period the abnormal digressions, as given in Table LI., are greatest on the average of the year at 4 P.M. and least at 6 A.M. They are greater at 2 P.M. and 4 P.M., taken together, than at the other four hours, not only on the average of the year, but in each month, the monthly and quarterly averages being as follows :

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
2^{h} and 4^{h}	10.0	11.0	12.8	14.0	13.0	13.9	11.5	11.0	10.8	10.4	10.2	10.2
10^{h}, 12^{h}, 18^{h}, 20^{h}....	7.0	7.5	8.5	9.7	11.1	11.5	8.4	6.8	7.1	7.3	7.1	6.8

	Spring.	Summer.	Autumn.	Winter.	Year.
2^{h} and 4^{h}	13.3	12.2	10.5	10.5	11.6
10^{h}, 12^{h}, 18^{h}, 20^{h}....	9.8	8.9	7.2	7.1	8.2

In Tables LII. and LIII. the mean abnormal variations, with their proper signs, are arranged according to the direction of the wind. In Table LII., where the mean results are given for each half-year and each year, it sometimes occurs that with half-yearly means of opposite signs, the yearly mean has the same sign as the half-year, of which the digression is numerically the smaller of the two. This is occasioned by the excess in the *number* of winds in the half-year for which the mean digression is numerically less, and by the fact that the annual mean is obtained by dividing the algebraical sum of all the abnormal variations accompanying the wind in question by the number of those winds. A similar explanation is applicable wherever cases of such apparent contradiction are found.

With winds from N.E., E., and S.E., the air is relatively damp, and with winds from W., N.W., and N., the air is relatively dry. The most damp wind is from E. and the most dry wind from N.W.; but the range is small, amounting only to 9.0. The dampness of the E. wind is greater in winter than in summer, and the dryness of the N.W. wind is greater in summer than in winter, but the range between these two winds remains nearly the same in both seasons.

On referring to table LIII. it is seen that the N.W. wind is relatively dry in every month, and that the east wind, with one exception, is relatively damp in every month. Winds from N., N.W., and W., are relatively dry in every month with six exceptions out of the thirty-six cases; winds from N.E., E., S.E., and S.W. are relatively damp, with ten exceptions out of forty-eight cases, while the S. winds, which are dry in the summer half-year and damp in winter, are dry in four of the six summer months and damp in four of the six winter months.

The average change in relative humidity in twenty-four hours, without regard to sign, is shewn by Table LIV. to be 8.9; the greatest monthly mean being 12.4 in June, and the least 7.3 in February. The quarterly means are 10.2 in spring, 9.6 in summer, 7.8 in autumn, and 7.7 in winter.

According to Table LV. the humidity on the average of the year increases in twenty-four hours when accompanied by a resultant wind from N.E., E., S.E., and S., and diminishes with a resultant from S.W., W., N.W., and N.; the greatest increase of humidity being with a resultant wind from E., and the greatest diminution with one from N.W. The range between the E. and N.W. winds however, is only 6.1.

It is just to remark with reference to Tables L. to LV. that the observations of only three years are materials too scanty to justify our regarding as conclusive the results that relate to the abnormal variations and diurnal changes of the relative humidity.

EXTENT OF SKY CLOUDED—(TABLES LVIII. TO LXI.)

In Table LVIII. the monthly and annual means of the extent of sky clouded (the hemisphere being unity,) are given for each of the six observation hours, and for each of the three years. Table LIX. contains the final columns of the several monthly parts of Table LVIII., and Table LX. the lower lines of the same monthly parts. From Table LIX. we find, on the average of the last three, as well as on that of the preceding six years, that December and August are the most cloudy and the least cloudy months respectively. The mean amounts of cloudiness in each quarter are proportional to the following numbers, the annual mean being unity:

	Winter.	Spring.	Summer.	Autumn.
1854–'59	1.22	0.97	0.81	1.04
1860–'62	1.19	0.92	0.82	1.05

Table LX. shews that 2 P.M. is the most cloudy hour on the average of the year, in both series, and that 10 P.M., or midnight, are the hours most free from clouds. If the monthly means at the several hours given in this table, as well as those from the corresponding table in the preceding volume, be combined in quarterly averages, it is found that in every quarter 10 P.M. and midnight are nearly equally cloudy, and that they are less cloudy than other hours. In both series the amount of cloud at 2 P.M. in winter, is equalled or exceeded by that at 6 A.M. and 8 A.M.; but, excepting in the summer quarter for 1860–'62, when 2 P.M. is very decidedly in excess, the difference between the hours 6 A.M., 8 A.M., 2 P.M., and 4 P.M., with respect to the amount of cloud, never exceeds .04. The diurnal ranges in the four quarters are as follows:

	Winter.	Spring.	Summer.	Autumn.
1854–'59	11	12	16	12
1860–'62	10	11	18	8

The extent of sky clouded under different surface winds is shewn in Table LXI. On the average of the whole year it appears from both series that there are two maxima; the principal one between E. and N.E., and the second at or about S.W. There are also two minima; one at or about S., and the other between N. and N.W. The two minima are nearly equal in the earlier series, but in the last three years the lowest minimum is decidedly at N.W. As the number of times any given wind blows is not the same in different months, neither the annual nor quarterly means under different winds can be deduced with strictness from the numbers in this table. But if, in order to form an approximate estimate of the general character of the progression in the amount of cloud from point to point of the compass that occurs in the different seasons, the monthly means corresponding to the different winds be grouped in quarterly averages, it is found that the double progression disappears in the winter and autumn, the minimum in both of these seasons being at N.W., and the winter maximum at or to the south of E. In spring and summer the progression is double, the principal maximum, as before, is between E. and N.E.; but in spring the principal minimum is between S. and S.E., while in summer the principal minimum is decidedly at N.W.

ON THE COMPARATIVE DURATION OF THE SURFACE WINDS FROM THE SIXTEEN PRINCIPAL POINTS, AND THE ANNUAL DISTRIBUTION OF EACH SEPARATE WIND WITH RESPECT TO ITS DURATION—(TABLES LXII. TO LXVIII).

These tables have been constructed in a manner similar to that employed for the years 1853 to 1859, in the Toronto Meteorological Results already published. The three years, 1860–'62, have been incorporated with the preceding seven years, and in order to shew the extent of the correspondence in the results of different years, the ten years, 1853-'62, have been discussed not only collectively but in two equal groups. In Table LXII. are given the absolute duration in hours of each of the sixteen winds and the calms, in each month and in the year, for the two partial periods as well as for the ten years collectively, the numbers in this table being derived from hourly records by Robinson's anemometer. The absolute durations for each quarter are given in Table LXIII. The numbers in Table LXIV. are the quotients arising from the division of the numbers in Table LXII. by the monthly and annual arithmetic means, *excluding* the calms; Table LXV. being derived in a like manner from Table LXIII.

According to the results furnished by the ten years, winds from S.S.W. through W. to N. are above the average of the sixteen winds on the average of the year; but the N.W. and N.N.W. winds alone are above the average in each separate month. The E. and E.N.E. winds are above the average on the whole year, and the E. is above the average in every month but December and January. The N. wind is above the average in every month but March, June, and November. The S. wind is below the average on the average of the year, as well as in every month but June, July, August, and September. The principal maximum on the whole year is at N.N.W., and the principal minimum at S.E.; there is also a second maximum at E., and a second minimum about N.N.E. to N.E. The positions of the maxima and minima among the points of the compass do not remain permanently fixed through the year. Referring to Table LXV. wherein the nature of their movements will be best seen, we find that in winter the progression is single, the maximum being at W.S.W. and the minimum between S.E. and S. In spring the maximum of the winter has moved northward to N.W., but it is equalled or surpassed by the eastern maximum which has reappeared together with the second minimum at N.N.E. In summer the western maximum is broken, as it were, into two almost equal maxima, the principal one being restored to N.N.W. while the second has receded to S.S.W., the eastern becoming thereby a third maximum. The first and second minima occupy the same positions as before, while a third minimum has appeared at W.S.W. In autumn the two western maxima of the summer coalesce and jointly approach the winter position, being now at W.N.W. The eastern maximum continues but it is considerably softened down.

Table LXVI., giving the quarterly ratios for the period of ten years, where calms are *included* in the divisors, has been formed to aid in the construction of Tables XI. and XII., wherein extraordinarily high and low temperatures are classed under the several winds.

The ratios in Table LXVII. shew the annual distribution of each wind taken singly. The only instance of an uninterrupted annual period is that of the south wind, which passes continuously from its maximum in July, to its minimum in December. The winds from S.E., S.S.E., and S.S.W. follow the same order as that of the south wind in their progression, but not with equal regularity. Winds from E.S.E., E., and E.N.E have their maxima in April or May. Proceeding from the S.S.W. towards the west, we find that the transition from month to month, in the frequency of S.W. winds, follows no definite rule; at W.S.W. and W. the maxima are found in the cold months and the minima in the warm months, while the winds from W.N.W. through N. to N.E. are very irregular. It may be remarked however, with reference to these latter, as well as to the S.W. winds, that although irregular as regards the differences between month and month, there is a fair correspondence in the different groups of years.

The general character of the annual march in the frequency of each wind taken singly, and the change in the position of the maxima in the annual period as different winds are considered, will be better seen from the quarterly averages of the ratios of Table LXVII., which are given in Table LXVIII. Commencing at E.N.E., the quarter of maximum frequency for E.N.E. and E. is spring; for E.S.E. and other points through S. to S.S.W. the greatest frequency is in summer. At S.W. a sudden breach of continuity takes place, the winter becoming the quarter of greatest frequency for winds from S.W., W.S.W., and W. With respect to winds from W.N.W. through N. to N.E. nothing of any definite character can be stated.

ON THE WINDS IN THE UPPER STRATA AS SHEWN BY THE MOTION OF THE CLOUDS.

(TABLES LXIX. TO LXXIV).

At each of the six observation hours a note was always made of the direction from which the clouds were moving. When the motion was too slow to be detected by the eye, or when no clouds were visible, the sky in these tables is designated as being calm or clear. It is probable that in many instances, and especially at the night hours, the clouds have been recorded as motionless in consequence of the inability of the observer to perceive the motion, and hence in part may be explained the very large number of cases of calm sky, amounting to nearly one-third of all the observations.

In Table LXIX. are given the absolute number of each upper wind, for each month as well as for the two half-years and year, as furnished by six observations daily during the nine years 1854-62. The quotients resulting from the division of the numbers in Table LXIX. by the monthly, half-yearly, and yearly means, *including* the cases of clear and calm sky, are given in Table LXX.

It is seen that while the winds from west are far more numerous than all other upper winds, they are exceeded in the six winter months separately and collectively by the calms, while in the summer the westerly upper winds exceed the calms in the six months collectively, and in each of the months, June, July, August, and September. The cases of clear sky are above the average of the observations, or more than one in ten, in every month but November and December.

The relative frequency of the different upper winds is seen better in Table LXXI., wherein the numbers of Table LXIX. are expressed in terms of the means of the eight winds, without including the cases of calm or clear sky.

Of the upper currents, that from the west greatly exceeds in frequency all others; not only on the average of the year, for which it is 3.80 times as frequent as the average frequency of all winds, but also in each month taken singly. Next in order of frequency in each month separately, is the wind from N.W., which has a more than average frequency in each single month, its relative frequency on the average of the year being 1.91. The S.W. wind is a little above the average of all winds in winter, and under the average in summer, while the winds from the other five points are greatly below the average in every month, the average of the ratios that express their relative frequency in the year being only 0.27. The least frequent upper wind is from the south, the next in order being the N.E. wind.

In Tables LXXII. and LXXIII. the half-yearly and yearly ratios in Tables LXX. and LXXI., derived from six daily observations, are compared with the ratios from the three hours, 8 A.M., 2 P.M., and 4 P.M., and with the ratios from the hours 10 P.M., midnight, and 6 A.M.

While the calms are more numerous than the west winds on the average of the year, when the *six* hours are reckoned together, it appears from LXXII., that for the three hours 8 A.M., 2 P.M., and 4 P.M., the west winds greatly exceed the calms on the average of the year, as well as in the winter and summer separately, the excess being greatest in the summer. For the other three hours the calms are greatly in excess in both seasons, and chiefly so in the winter.

In Table LXXIII., where the winds alone are compared without reference to the calm or clear sky, it is found that the west wind maintains its preponderance materially to the same extent in each group of hours. The N.W. wind is the second, and the S.W. wind the third in order of frequency, in both seasons and in both groups of hours; but both in summer and in winter the excess of the N.W. over the S.W. wind is greatest in the night and least in the day.

The annual distribution of each upper wind is given in Table LXXIV., together with the ratios expressing the relative frequency of each wind in the winter as compared with the summer. The monthly numbers are derived from those of Table LXXII. by dividing these latter by the annual means corresponding to each wind. The three final columns are obtained by dividing the numbers in the columns of Table LXXII. headed "winter," by the numbers in the columns headed "summer."* From the three final columns it is seen that the N., N.W., and S.W. winds, on the average of the six hours, are nearly equally frequent in winter and in summer, the frequency in winter slightly exceeding that in summer during the day and falling short of it in the night; the greatest disparity in the day and night occurring with the S.W. wind. The S.E. and S. winds are in excess in winter as compared with summer, both during the day and during the night. The E., N E., and W. winds are less frequent in winter than in summer at all hours, and particularly during the night. In fact, with respect to all upper winds, it may be stated that the ratios expressing their relative frequency in winter as compared with their frequency in the summer, are greater at the hours 8 A.M., 2 P.M., and 4 P.M., than at 10 P.M., midnight, and 6 A.M. The calms of winter greatly exceed in frequency those of summer, the preponderance being nearly the same at all hours. Cases of clear sky, on the contrary, are most frequent in summer, their preponderance in summer being the same for both groups of hours.

In Table LXXV. are collected the absolute number of each upper wind at each separate observation hour, together with the aggregate number in each of the two groups of hours, namely at 10 P.M., midnight, and 6 A.M., and at 8 A.M., 2 P.M., and 4 P.M.

Table LXXVI. shews for each hour separately, as well as for each of the two groups of hours, the relative frequency of each upper wind, together with the cases of calm and clear sky. It is derived from the preceding table by dividing the numbers therein contained by the arithmetic means given in the last line but one. Table LXXVII. has been computed in a similar manner from Table LXXV., the divisors being the arithmetic means in the lowest line of that table.

From Table LXXVI. we learn that while upper winds from the west greatly exceed all other winds at every hour, the calms are more numerous than the west winds at the hours 6 A.M., 10 P.M., and midnight, both separately and collectively, and less numerous at 8 A.M., 2 P.M., and 4 P.M. Cases of clear sky are above the average, or exceed one in ten of the observations at every hour but 2 P.M. Midnight is the hour at which a clear sky is most frequent; clear sky being generally more than twice as frequently found during the hours 6 A.M., 10 P.M., and midnight, as at the other hours.

From Table LXXVII., in which the different upper winds are compared, without reference to the cases of calm or clear sky, we find that the west is by far the most frequent of the upper winds, but that its preponderance is nearly the same at all hours The N.W. is the second in order of frequency, and the S.W. the third. The N.W. wind at all hours is above the average of all winds; but the excess in its frequency is greater in the night than in the day. The S.W. wind is equal to the average of all winds during the day, but considerably below it in the night. Winds from the remaining five points are greatly below the average at all hours.

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* The numbers which in Table LXXII. are given to two decimal places, were carried out to three places when the divisions were performed; hence the want of perfect accordance between Table LXXII. and the three final columns of Table LXXIV.

The diurnal distribution of each upper wind, taken singly, is shewn in Table LXXVIII. The hourly numbers are derived from those of Table LXXV. by dividing them by the six-hour means in the final column of that table. The three final columns of Table LXXVIII. give the ratios of the absolute number of each upper wind at the day hours to the absolute number of the same wind at the hours of the night.

From the hourly numbers in this table it appears that every upper wind is above the average during the three hours 8 A.M., 2 P.M., and 4 P.M., and below the average at the other hours, an exception being made with respect to the S.E. wind at 6 A.M., The excess in the frequency of all upper winds at the three day hours, as compared with that of the other three hours, is shewn by the final columns to be greater in winter than in summer. It is greatest for the N.E. wind and least for the N.W. wind. Both calm sky and clear sky are less than half as frequent in the day as in the night, the disparity between the day and night being the same for both, and being also the same in winter as in summer.

Tables LXXIX., LXXX., LXXXI., are derived from the observations of three years only, namely, 1860, '61, and '62, and are designed to shew the relations between the upper currents and the simultaneous surface winds. The method employed in the computation is sufficiently explained by their titles.

It is obvious that if the decimal points be omitted in Table LXXX. the numbers under any point of the compass will shew how often, out of a thousand times that the corresponding surface wind occurs, it is accompanied by each of the several upper currents. Thus out of 1000 times that a surface north wind blows, calms aloft occur 375 times, a clear sky 273 times, an upper current from N. 38 times, and one from S. only 4 times. With a surface wind from E. the clouds move more frequently from W. than from E. With surface S. winds the clouds never move from the N., and they are about 27 times as numerous from the W. as they are from the S. Whatever be the surface wind, unless it be from S., S.W., or W., it is more frequently attended by a calm sky than by a motion of the clouds in any one specified direction; but when the lower wind is from S., S.W., or W., a motion of the clouds from W. is more frequent than a calm sky. A clear sky is above the average with surface winds from every point but the E.; in other words it occurs in the ratio of more than one for every ten times that each surface wind blows. Calms aloft and upper winds from W. are above the average during every surface wind. A calm sky is more frequently an accompaniment of an easterly surface wind than of a surface calm.

Whatever be the surface wind, it appears from Table LXXXI. that the westerly upper wind far exceeds all other upper winds in frequency. It is most frequent with a surface wind from W., and least frequent with one from E. The N.W. upper current which stands next in order of frequency is above the average of the upper currents with all surface winds but those from E. and N.E. The S.W. is above the average of upper currents when the surface wind is from any point from N.E. through S. to S.W., and below the average with a surface wind from N., N.W., and W. The upper current from E. is above the average when the surface wind is from N.E. and E., but below the average with all other surface winds. The S.E. upper wind is far below the average, excepting during an easterly surface wind, when it is slightly above. Upper winds from N., N.E., and S. are below the average whatever be the winds at the surface.

ON THE RELATIVE FREQUENCY OF THE DIFFERENT WINDS DURING DAYS OF RAIN OR SNOW, FROM THE HOURLY RECORDS OF TEN YEARS (TABLES LXXXII. TO LXXXVI.,)

The object of these tables is to compare the different winds with reference to the number of hours that they blow during days in any part of which a fall of rain or snow takes place. If all winds continued for an equal number of hours through the year or through the particular season under consideration, it would be sufficient to compare the *absolute* durations of the several winds on days of precipitation; but as there is a very great inequality in the frequency of winds from different points of the compass, (winds from N.W., for example, being more than three times as numerous as those from S.E ,) an undue prominence would be given to the winds of greater general frequency, if the comparison were to be made between the absolute durations. Hence it becomes requisite that the absolute durations of each wind during the days of rain included within a given period of time, should be divided by the whole duration of the same wind within the same period. The quotients form what may be termed the *relative* durations of the several winds, and constitute the proper quantities for intercomparison.

As winds of comparatively rare occurrence on days of heavy rain were found, according to the results in the preceding volume, to blow very frequently on days of light rain, the adoption of some classification of the rainy days became necessary. In these tables the days of rain have been arranged in three classes, which have been considered separately, as well as collectively in one group. Class I. includes days of light rain, in which the whole amount in the day did not exceed one-tenth of an inch. Class II. includes days of moderate rain, or over one-tenth and less than half an inch, while Class III. comprises days of heavy rain, wherein the fall in the day amounted to half an inch and upwards. The days in which snow fell are classified in a similar manner and with the same limits, one inch of snow being regarded as equivalent to one-tenth of an inch of rain. With a view of learning whether the relative duration or frequency of a wind during rain is affected by the season, the computations have been made separately for the winter half-year (October to March,) for the summer half-year (April to September,) and for the year as a whole. As the falls of snow after March are not sufficiently numerous to furnish materials for a separate discussion, no separation of the seasons has been made in the case of the snow.

Again, for the purpose of comparing the corresponding results in different years, the observations of the ten years, 1853 to 1862, have been discussed in two separate equal groups as well as in one.

In Table LXXXII. the durations of the different winds on days of rain during the six months, October to March, are examined. The three lines marked (1) in Class I. contain the absolute number of hours that each wind blew on days of light rain. The three lines marked (2) give the absolute number of hours that the same winds blew, with and without rain, during the same period. The three lines marked (3) are the relative durations of the several winds, being the quotients arising from the division of the numbers in (1) by the corresponding numbers in (2). It is clear, if the decimal points be disregarded, that any one of the numbers in (3) will indicate the number of hours comprised in days of light rain out of a thousand hours during which the corresponding wind blew within the same period: thus out of 1000 calm hours in the winters of the ten years, 1853 to 1862, 169 occurred during days of light rain. The ratios in the three lines marked (4) are obtained from the numbers in (3) by dividing each number by the arithmetic mean of the seventeen numbers in the same line. The computations for the other classes in Table LXXXII. as well as those of the corresponding tables for the rain in the summer half-year, for the rain in the whole year, and for the snow (Tables LXXXIII., LXXXIV., and LXXXV.,) have been made in a precisely similar manner.

Table LXXXVI. gives a synopsis of the final ratios in the four preceeding tables.

Referring to the results of the ten years, it appears that in winter, whatever be the class of the rainy days, the progression in the relative frequency of the different winds is single, the maximum being at or near east, and the minimum at N.W. The amplitude however, is much greater for the heavier falls, the ratio of the maximum to the minimum being more than 20 : 1 in Class III., and less than 2 : 1 in Class I. The portion of the compass also for which the relative frequency is above the average extends from E.N.E. through S. to S.W. in Class I., but is limited in Class III. to the points N.E. to S.S.E. inclusive.

Between the summer and the winter half-years a marked contrast may be noticed, and particularly as regards the lighter rain, a double progression in the summer occurring in each of the classes.

For light rain the principal maximum is at W.S.W. and the principal minimum at or near N.N.E. the second maximum being at or near E., and a second minimum between S. and S.E. In Class II. the maximum at E. slightly exceeds the western maximum, and in Class III. the excess is very decided. Where rain is considered without reference to its amount, the eastern and western maxima are very nearly equal. Taking the whole year together, the distribution of the winds in Class I. is chiefly governed by the summer half-year, while Classes II. and III. resemble the same classes in the winter, although with less prominently marked features.

For the light snow there is a tolerably well defined maximum at or near W. From W., in both directions round the compass, there is a descent in the frequency of the winds as far as E. and S., at which points there are what may be termed two equal minima including a space, for which, on the average of the three included points, the winds are about 1.3 times as numerous as at either E. or S.

Classes II. and III., which possess the same general characters as regards the distribution of the winds, are in striking contrast with that which is found to accompany the lighter falls of snow; the most frequent wind on days of moderate or heavy snow being very decidedly at or near N.E., while the western maximum is nearly obliterated. The wind of most rare occurrence during such falls being from points at or near S. When no account is taken of the amount of snow that falls in the day, the most frequent wind relatively is from W., the N.E. wind forming a second maximum not very inferior to that at W. The least frequent wind is from S., and there is also a second depression between the maxima at W. and N.E., but which does not fall below the average as compared with all the points of the compass.

DEPTH AND FREQUENCY OF RAIN AND SNOW—(TABLES LXXXVII. AND LXXXVIII.)

The number of days of rain, together with its depth in inches, for each month of the years 1860, 1861, and 1862, are given in Table LXXXVII. Table LXXXVIII. contains the corresponding results for snow. The monthly and annual averages for the three years are accompanied by the corresponding averages derived from a series of years. The average frequency of rain and snow is derived, in each case, from the records of twenty-three years; but owing to breaks that occurred in the early part of the series, the average monthly and annual depths of rain are obtained from twenty-one, and those of snow from twenty years.

From these tables it appears that both rain and snow were much more *frequent* on the average of the three years, 1860-'62, than on that of the whole series, for the year taken collectively, as well as for almost every month; days of rain being about 20 per cent. and days of snow about 30 per cent. more numerous in the partial than in the entire series. The *depth* of rain, on the contrary, was nearly 16 per cent. in defect on the average of the three years, as compared with the general average of the whole series. The average annual depth of snow was in excess, but not to such an extent as to compensate for the deficient rain; the general deficiency in the precipitation of the three years (allowing an inch of rain to be equivalent to ten inches of snow,) being more than 11 per cent.

The results derived from the hourly rain gauge, which was in operation from April to November in 1861, and from April to October in 1862, do not reveal any distinct diurnal period, either as regards the depth or the frequency of the rain. Arranging the day in six periods of four hours each, and dividing the depth of rain in each period and its frequency (or the number of hours in any part of which a fall occurred,) by the average depth and frequency in the six periods, the ratios are obtained which are given in the annexed table.

PERIODS.	6 A.M. to 10 A.M.	10 A.M. to 2 P.M.	2 P.M. to 6 P.M.	6 P.M. to 10 P.M.	10 P.M. to 2 A.M.	2 A.M. to 6 A.M.	Average of the six periods.
Depth, ...1861....	0.55	0.76	1.37	1.41	1.07	0.84	1.00
" ....1862....	1.18	0.93	1.00	0.92	0.97	1.00	1.00
Frequency, 1861....	0.84	0.84	1.02	1.06	1.08	1.16	1.00
" 1862....	1.18	0.97	0.92	0.99	0.88	1.06	1.00

MEAN ANNUAL VARIATIONS OF TEMPERATURE FROM THE OBSERVATIONS OF TWENTY-THREE YEARS.

Table LXXXIX. is an extension of a similar table published by General Sabine on page 163 of the Philosophical Transactions for the year 1853. The monthly and annual means of temperature for the twelve years, 1841-'52, are reprinted from the paper of General Sabine. For the eleven years, 1853-'63, inclusive, the monthly means derived from six observations each day are corrected for diurnal variation, by aid of the tables by General Sabine on pp. 145 and 146 of the same volume.

For the sake of comparison the means furnished by the twelve years, 1841-'52, have been introduced, together with the normal temperatures for the parallel of latitude 43° 40 N. as computed by Dove.

The probable variabilities of the several months at the foot of the table are derived from the squares of the differences between the partial and general monthly means. The quarterly averages of these numbers, from the series of twenty-three years, and from the twelve years, are as follows:

	Winter.	Spring.	Summer.	Autumn.
1841-'52	2°.6	2°.2	1°.4	1°.8
1841-'63	2.8	2.0	1.5	1.6

The probable variability of a single year, as regards the annual mean, is 0°.63 for the twelve years, and 0°.61 for the twenty-three years.

The following are the quarterly averages of the probable errors of the monthly means for the whole period:

Winter.	Spring.	Summer.	Autumn.
$0^\circ.59$	$0^\circ.42$	$0^\circ.30$	$0^\circ.33$

The probable error of the general mean temperature for the year is $0^\circ.18$ for the twelve years, and 0°.13 for the twenty-three years.

If the assumption be accepted that the monthly means of temperature for the whole period are the temperatures proper to epochs separated by twelve equal intervals, the January mean being the mean temperature corresponding to the 15th of that month, regarded as the zero of time, then will the temperature T_n, corresponding to the time (n), (the unit of time being the twelfth part of a year) be represented by the expression.

$$\begin{aligned} T_n = 44^\circ.18 &+ 22^\circ.32 \sin(n \times 30^\circ + 261^\circ\ 2') + 0^\circ.74 \sin(2n \times 30^\circ + 78^\circ\ 25'). \\ &+ 0^\circ.61 \sin(3n \times 30^\circ + 181^\circ\ 8') + 0^\circ.29 \sin(4n \times 30^\circ + 38^\circ\ 3'). \\ &+ 0^\circ.74 \sin(5n \times 30^\circ + 51^\circ\ 7') + 0^\circ.30 \cos(6n \times 30^\circ). \qquad \text{(I.)} \end{aligned}$$

The two assumptions, (1) that the mean temperature of a month is identical with the temperature of its middle point, and (2) that the months are all of equal length, are evidently not in strict accordance with fact. A nearer approach to accuracy will be made by admitting the second of the preceding assumptions only and by applying corrections for the errors introduced by the first. Making the necessary corrections* to the co-efficients of the several terms of equation (I.), the mean diurnal temperature T' at any time (n), will be given more accurately by the following equation:

$$\begin{aligned} T'_n = 44^\circ.18 &+ 22^\circ.58 \sin(n \times 30^\circ + 261^\circ\ 2') + 0^\circ.77 \sin(2n \times 30^\circ + 78^\circ\ 25'). \\ &+ 0^\circ.68 \sin(3n \times 30^\circ + 181^\circ\ 8') + 0^\circ.35 \sin(4n \times 30^\circ + 38^\circ\ 3'). \\ &+ 1^\circ.00 \sin(5n \times 30^\circ + 51^\circ\ 7') + 0^\circ.47 \cos(6n \times 30^\circ). \qquad \text{(II.)} \end{aligned}$$

If the values 0, 1, 2, &c., 11, be substituted for (n) in equations (I.) and (II.), the corresponding values of T_n in equation (I.) will be identical with the monthly means from the records of twenty-three years given in Table LXXXIX.; and the corresponding values of T'_n in equation (II.) will be the diurnal means proper to the middle points of the twelve months regarded as of equal length.

Mean Annual Variations of Barometric Pressure from the Observations of Twenty-Three Years.

The mean barometric pressures for every month of each of the twenty-three years, 1841 to 1863, have been collected in Table XC. During the seven years, July 1842 to June 1848, the readings were made at each of the twenty-four hours. From this series tables were formed containing, for each month and hour, the differences between the monthly means for the hour and the monthly means on the average of twenty-four hours. These differences being regarded as corrections for diurnal variation, were employed in reducing the monthly means in the remainder of the series, during the greater part of which the observations were made six times only each day.

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* See note on page xxiv.

The greatest probable variability of a monthly mean, .0562, is in February, and the least, .0292, is in July. The quarterly averages of the probable monthly variabilities and of the probable errors of the monthly means given by the whole series, are the following:

	Winter.	Spring.	Summer.	Autumn.
Variability	.0435	.0433	.0313	.0414
Probable error....	.0091	.0090	.0065	.0086

The probable variability of a single year with respect to the annual mean barometric pressure is .0125, and the probable error of the general annual mean for the whole series is .0026.

Making the same assumptions as in the case of temperature, B_n, the diurnal mean of barometric pressure at any time (n), may be computed from the following formula, derived from the twelve monthly means at the foot of Table XC.

$$\begin{aligned} B_n = 29.6190 &+ .0350 \sin(n \times 30^\circ + 147^\circ\,21') + .0126 \sin(2n \times 30^\circ + 11^\circ\,29'). \\ &+ .0177 \sin(3n \times 30^\circ + 116^\circ\,34') + .0067 \sin(4n \times 30^\circ + 133^\circ\,11'). \\ &+ .0081 \sin(5n \times 30^\circ + 251^\circ\,20') - .0018 \cos(6n \times 30^\circ). \qquad \text{(I.)} \end{aligned}$$

The diurnal means are given more accurately by the following equation, obtained from (I.) by applying the requisite corrections* to the co-efficients:

$$\begin{aligned} B'_n = 29.6190 &+ .0354 \sin(n \times 30^\circ + 147^\circ\,21') + .0132 \sin(2n \times 30^\circ + 11^\circ\,29'). \\ &+ .0197 \sin(3n \times 30^\circ + 116^\circ\,34') + .0081 \sin(4n \times 30^\circ + 133^\circ\,11'). \\ &+ .0109 \sin(5n \times 30^\circ + 251^\circ\,20') - .0028 \cos(6n \times 30^\circ). \qquad \text{(II.)} \end{aligned}$$

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[*] To effect the corrections to which reference is made above, the coëfficients of the terms in (I.) which involve n, $2n$, $3n$, &c., are multiplied respectively by the factors $\dfrac{\frac{\pi}{12}}{\operatorname{Sin}\frac{\pi}{12}}$, $\dfrac{\frac{2\pi}{12}}{\operatorname{Sin}\frac{2\pi}{12}}$, $\dfrac{\frac{3\pi}{12}}{\operatorname{Sin}\frac{3\pi}{12}}$, &c. The products resulting from this multiplication are the coëfficients of the corresponding terms in (II.)

TORONTO

METEOROLOGICAL RESULTS.

GENERAL METEOROLOGICAL ABSTRACT.—JANUARY, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles									
1	...	...	...	...	...	...	N 85° W	5.69	6.85	9°.6	–3°.0	12°.6	...	...	...	...	...	...
2	4.40	0.045	83	30.104	30.058	0.72	N 87 W	4.45	6.54	11.8	–1.8	13.6	...	...	0.2	2.0	0.020	2.0
3	16.42	.080	87	29.772	29.692	1.00	S 66 W	12.54	12.68	22.2	5.0	17.2	...	...	1.5	11.0	.150	11.0
4	9.32	.060	83	.867	.806	0.50	N 58 W	11.08	11.43	20.2	10.8	9.4	...	...	0.2	1.5	.020	1.5
5	12.33	.064	83	30.111	30.048	0.62	S 77 W	9.60	9.77	18.4	–6.8	25.2	...	...	..	...	..	...
6	24.32	.108	79	29.758	29.650	0.92	S 52 W	9.76	9.92	33.9	11.2	22.7	...	...	*	0.3	*	0.3
7	35.18	.193	93	.392	.199	1.00	S 54 W	3.68	3.78	37.0	28.1	8.9	0.200	8.2	...	...	.200	8.2
8	...	...	...	...	...	...	S 68 W	7.03	8.00	38.6	33.4	5.2	*	0.5	...	...	*	0.5
9	33.82	.171	87	.695	.524	1.00	S 89 E	6.04	6.18	29.0	32.0	7.0	.170	6.5	*	*	.170	6.5
10	38.22	.206	90	.549	.343	1.00	N 15 E	3.41	7.73	42.5	33.8	8.7	.340	8.2	0.1	0.3	.350	8.5
11	19.60	.09	87	.743	.647	1.00	N 25 W	11.07	11.27	28.5	19.8	8.7	...	...	0.2	2.9	.020	2.9
12	18.85	.07	77	.812	.733	0.42	S 78 W	8.51	11.63	24.0	10.4	13.6	...	...	...	...	...	...
13	12.32	.068	88	.950	.882	0.70	N 43 E	5.00	5.23	19.2	8.6	10.6	...	...	0.5	5.0	.050	5.0
14	20.08	.097	87	.473	.376	0.73	S 67 W	2.24	2.51	28.0	9.5	18.5	...	...	...	...	...	...
15	...	...	...	...	..	...	S 56 W	13.89	14.10	37.0	22.4	14.6	...	...	...	...	...	...
16	32.98	.151	79	.360	.209	0.78	N 65 W	6.30	8.46	38.2	33.5	4.7	*	*	...	...	*	*
17	20.20	.087	81	.491	.404	1.00	N 17 W	4.57	4.81	23.2	19.4	3.8	...	...	0.1	2.0	.010	2.0
18	25.25	.118	86	.364	.245	0.85	S 78 W	7.75	10.18	29.2	17.0	12.2	...	...	2.0	12.0	.200	12.0
19	24.33	.105	80	.510	.405	0.75	S 73 W	11.67	13.12	28.5	16.0	12.5	...	...	*	0.5	*	0.5
20	34.68	.155	77	.393	.238	0.62	S 52 W	9.65	9.81	40.2	23.9	16.3	...	...	...	...	...	...
21	33.98	.152	77	.442	.290	0.23	N 79 W	4.16	4.58	42.4	31.7	10.7	...	...	...	...	...	...
22	...	...	...	...	...	...	N 79 W	10.33	10.83	38.2	22.2	16.0	...	...	0.2	0.5	.020	0.5
23	30.15	.119	70	.838	.718	0.23	S 56 W	4.11	4.49	35.5	23.0	12.5	...	...	...	...	...	...
24	41.48	.203	77	.422	.219	0.98	S 70 W	12.54	13.49	46.4	30.8	15.6	.030	0.8	...	...	.030	0.8
25	31.92	.113	64	.621	.508	0.32	N 66 W	18.88	19.28	37.8	32.5	5.3	...	...	...	...	...	...
26	20.68	.082	75	.751	.669	0.93	N 59 W	1.51	1.51	23.0	19.5	3.5	...	...	...	...	...	...
27	19.57	.088	81	.557	.469	0.57	N 71 W	5.63	8.63	27.4	16.8	10.6	...	...	1.0	5.2	.100	5.2
28	17.13	.083	84	.492	.410	0.50	N 3 W	4.50	7.60	24.4	10.8	13.6	...	...	2.5	5.0	.250	5.0
29	...	...	...	...	...	...	S 56 W	14.30	16.29	38.5	8.0	30.5	...	...	...	...	...	...
30	28.35	.108	68	.379	.271	0.42	N 86 W	16.43	20.31	34.0	22.2	11.8	...	...	0.1	0.8	.010	0.8
31	2.35	.037	74	.872	.834	0.67	N 9 E	9.19	9.36	7.9	4.3	3.6	...	...	0.1	1.5	.010	1.5
	23°.38	0.110	81	29.643	29.533	0.71	N 89° W	6.09	9.37	29°.83	17°.58	12°.25	0.740	24.2	8.7	50.5	1.610	74.7

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—FEBRUARY, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	1.70	0.037	76	30.042	30.005	0.62	N 71 W	3.23	3.72	9.0	-8.5	17.5	...	...	...	...	...	...
2	10.98	.058	81	30.073	30.015	0.62	N 75 W	2.46	2.47	17.2	5.0	12.2	...	...	*	4.0	*	4.0
3	14.35	.067	78	29.960	29.893	0.60	S 25 E	3.06	3.90	20.0	7.2	12.8	...	...	0.1	3.5	.010	3.5
4	19.42	.083	80	.979	.896	0.73	N 34 W	0.34	0.85	25.6	10.4	15.2	...	...	...	...	...	...
5	...	...	...	...	...	...	S 13 E	4.20	6.45	38.0	11.5	26.5	0.135	5.0	0.2	6.0	.155	11.0
6	35.52	.172	83	.320	.148	1.00	S 79 W	5.79	5.96	42.8	31.0	11.8	...	...	...	...	...	...
7	28.28	.112	71	.603	.491	0.43	N 81 W	10.10	10.43	31.2	28.8	2.4	...	...	*	1.0	*	1.0
8	29.97	.139	83	.579	.440	0.18	S 38 W	6.80	6.92	35.3	22.0	13.3	...	...	...	...	...	...
9	27.87	.121	70	.256	.135	0.72	N 79 W	18.15	22.98	41.5	27.5	14.0	*	0.2	...	...	*	0.2
10	7.07	.045	74	.912	.867	0.18	N 29 W	7.66	8.44	12.8	3.9	8.9	...	...	0.2	2.3	.020	2.3
11	13.97	.076	91	.538	.463	1.00	N 1 E	2.67	7.10	19.8	5.0	14.8	...	...	2.0	13.5	.200	13.5
12	...	...	...	...	...	...	S 84 W	4.18	5.17	22.5	1.8	20.7	...	...	...	...	...	...
13	27.33	.136	90	.532	.396	1.00	N 10 W	3.59	4.08	32.4	17.0	15.4	...	...	4.0	5.5	.400	5.5
14	14.50	.071	81	.812	.741	0.42	N 4 E	8.56	11.29	23.2	18.0	5.2	...	...	...	...	...	...
15	23.87	.115	89	.422	.307	0.98	S 70 E	5.56	13.59	28.0	4.2	23.8	...	...	3.0	10.5	.300	10.5
16	9.57	.059	85	.512	.452	0.40	N 62 W	12.19	13.18	20.0	11.5	8.5	...	...	...	...	...	...
17	4.88	.043	78	.632	.589	0.33	N 66 E	5.45	7.51	19.6	-5.4	25.0	...	...	...	...	...	...
18	13.40	.071	88	.050	28.980	1.00	N 13 E	16.25	20.73	20.2	7.2	13.0	...	...	9.0	18.6	.900	18.6
19	...	...	...	...	...	...	N 73 W	9.06	11.79	22.7	6.2	16.5	...	...	...	...	...	...
20	28.28	.129	82	.538	29.410	0.67	S 55 W	7.08	7.17	34.6	11.5	23.1	...	...	0.3	2.7	.030	2.7
21	33.72	.154	78	.675	.521	0.32	N 80 E	4.96	7.00	39.6	17.5	22.1	.305	4.0	...	...	.305	4.0
22	43.83	.259	90	.158	28.898	0.67	S 2 W	3.88	8.15	50.2	35.6	14.6	.275	8.3	...	...	.275	8.3
23	30.88	.137	76	.314	29.177	0.98	N 78 W	15.88	17.43	39.8	32.2	7.6	*	2.0	*	1.0	*	3.0
24	20.48	.086	77	.598	.512	0.58	N 59 W	9.32	10.15	24.5	22.0	2.5	...	...	*	1.0	*	1.0
25	18.42	.067	68	.768	.700	0.63	N 68 W	10.04	10.57	23.4	13.6	9.8	...	...	*	0.2	*	0.2
26	...	...	...	...	...	...	S 31 W	8.01	8.75	35.6	12.2	23.4	...	...	...	...	...	...
27	40.22	.181	72	.814	.633	0.73	N 81 W	2.32	4.86	45.4	29.8	15.6	...	...	...	...	...	...
28	34.27	.169	85	.984	.814	1.00	N 75 E	8.28	8.53	27.0	33.5	3.5	.230	5.0	...	...	.230	5.0
29	37.90	.222	96	.738	.516	1.00	N 52 E	3.70	3.99	41.5	32.0	9.5	.385	21.0	...	...	.385	21.0
	22.83	0.112	81	29.632	29.520	0.67	N 61 W	3.28	8.73	29.43	15.32	14.11	1.330	45.5	18.8	69.8	3.210	115.3

* Inappreciable.

	22°83	0.112	81	29.632	29.520	0.67	N 61° W	3.28	8.73	29°.43	15°.32	14°.11	1.330	45.5	18.8	69.8	3.210	115.3

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MARCH, 1860.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
								Miles.	Miles.									
1	42°85	0.262	95	29.499	29.237	1.00	S 83° W	3.12	6 93	46°.5	38°.0	8°.5	0.017	3.0	...	..	0.017	3.0
2	40.15	.184	74	.785	.602	0.38	N 69 W	3.90	12.76	48.4	35.0	13.4	...	...	...	...	--	--
3	41.07	.173	68	.344	.172	0.77	S 69 W	13 76	20.35	50.2	34.2	16.0	.015	4.0	...	...	.015	4.0
4	...	...	...	...	...	...	N 83 W	14 52	16.57	37.0	29.5	7.5	...	...	0.2	2.0	.020	2.0
5	31.63	.137	76	.351	.214	0 28	N 63 E	4.60	7.41	37.2	23.5	13 7	...	...	..	...	--	--
6	33.08	.153	81	.543	.390	0.67	N 78 E	12.35	12 96	37.2	28.2	9.0	.265	6.5	0.1	0.5	.275	7.0
7	45.42	.232	73	.193	28.961	0.33	W	7.94	9.68	62 5	32.4	30 1	...	...	...	...	--	--
8	40.35	.130	52	.459	29.329	0 67	N 63 W	13.07	14.07	47.5	38.8	8.7	...	...	...	...	--	--
9	26 57	.094	67	.411	.317	0.85	N 49 W	19.28	20.01	34.2	26 0	8.2	...	...	...	...	--	--
10	23.77	.085	65	.541	.456	0 92	N 52 W	18.02	18.36	28.5	15.0	13.5	...	...	0.2	1.0	.020	1.0
11	...	...	...	...	...	...	N 75 W	6.61	8.64	39.0	24.0	15.0	...	...	*	1.5	*	1.5
12	18.28	.075	74	.582	.507	0.42	N 31 W	19.81	20.46	22.0	19.2	2 8	...	...	0.5	8 0	.050	8.0
13	25.65	.109	78	.800	.690	0.63	S 55 W	4.06	5.22	30 4	12.8	17.6	...	...	1.0	5.0	.100	5 0
14	34.00	.145	72	.753	.608	0.13	S 82 W	2.70	3 91	43.5	23.4	20.1	...	...	*	1.0	*	1.0
15	36.17	.149	70	.885	.736	0 00	S 25 W	1.92	3.82	46.0	26.6	19.4	...	...	...	...	--	--
16	36.83	.162	73	.864	.702	0.00	S 74 E	3.07	3.50	46.5	28.0	18.5	...	...	...	...	--	--
17	40.18	.179	71	.854	.675	0.02	N 75 E	3.86	4.32	47.2	28.0	19.2	...	...	...	...	--	--
18	...	...	...	...	...	..	N 73 E	5.80	6.40	51.0	33.0	18.0	...	...	..	...	--	--
19	40.78	.229	89	.531	.302	0.62	N 62 E	0.89	4.83	45.0	37 5	7.5	585	7.5	...	...	.585	7.5
20	34.60	.148	71	.400	.252	0.90	N 58 W	20.38	22.77	43.3	35 0	8.3	*	1.0	0.2	0.1	.020	1.1
21	24.78	.082	60	.691	.609	0 22	N 44 W	28.77	28.83	29.4	17.8	11.6	...	...	...	...	--	--
22	31.07	.099	55	.483	.383	0.23	N 51 W	20.00	21.48	38 8	22 7	16 1	...	...	...	...	--	--
23	30 33	.134	80	.324	.190	0 57	N 82 W	5 46	10.08	35.0	26.0	9.0	...	...	0 1	0.4	.010	0.4
24	25 68	.107	76	.268	.160	0.95	N 64 W	17.14	17.50	28.4	23.4	5.0	...	...	0.1	2.4	.010	2.4
25	...	...	...	...	...	...	N 53 W	16.16	16.44	31.2	21.4	9.8	...	...	*	0.5	*	0 5
26	25.35	.078	59	.680	.602	0.40	N 39 W	10.10	10.66	32.8	20.2	12.6	...	...	...	...	--	--
27	33.78	.131	68	.511	.380	0.08	S 47 W	12.28	13.63	43.0	21.0	22.0	...	...	...	...	--	--
28	31.30	.131	74	.398	.267	0.55	N 82 W	12.81	14 71	37.4	28.0	9.4	...	...	...	...	--	--
29	39.07	.135	58	.309	.174	0.18	N 86 W	4.45	6.13	55.0	28 8	26.2	...	...	...	...	--	
30	45.03	.189	67	.222	.043	0.33	S 45 W	10.82	11.52	57.5	29.0	28.6	...	...	...	...	..	
31	53.20	.270	64	.108	28.838	1.00	N 84 W	7.96	10.66	67.0	41.5	25.5	...	...	...	...	--	.
	34°.48	0.148	71	29.511	29.363	0.49	N 64° W	7.61	12.41	41°.89	27°.35	14°.54	0.882	22.0	2.4	22.4	1.122	44.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—APRIL, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles.									
1	...	...	...	...	...	...	N 35° W	19.93	20.09	36°.5	33°.0	3°.5	...	...	...	...	...	...
2	26.42	0.085	57	29.499	29.414	0.40	South	2.84	9.57	32.7	19.5	13.2	...	...	0.1	1.0	0.010	1.0
3	40.93	.191	76	.080	28.889	0.55	S 31 W	7.05	7.64	52.4	26.8	25.6	...	...	...	...	...	...
4	43.70	.213	75	.009	28.796	0.67	N 69 E.	4.17	14.58	52.0	32.2	19.8	0.410	5.8	...	...	.410	5.8
5	39.43	.176	72	.211	29.035	0.63	N 81 W	6.94	9.20	48.5	36.0	12.5	.010	0.2	...	...	.010	0.2
6	...	...	...	...	...	...	S 16 W	2.83	5.72	49.0	32.0	17.0	...	...	...	...	...	...
7	41.42	.198	75	.608	.410	0.95	N 65 E	7.34	8.77	45.2	29.8	15.4	.052	5.8	...	...	.052	5.8
8	...	...	...	...	...	...	N 4 E	5.03	7.48	57.0	39.0	18.0	...	...	...	...	...	...
9	42.08	.202	75	.613	.411	0.88	N 54 E	8.40	9.79	45.5	41.0	4.5	...	...	...	...	...	...
10	41.85	.242	90	.441	.199	1.00	N 2 W	6.30	9.15	50.0	35.8	14.2	.135	1.5	...	...	.135	1.5
11	39.35	.170	72	.641	.471	0.53	N 27 W	4.51	6.13	50.2	34.8	15.4	...	...	...	...	...	...
12	40.53	.199	77	.516	.316	0.52	S 77 W	11.86	15.49	51.0	27.6	23.4	.045	0.5	...	...	.045	0.5
13	40.72	.200	79	.552	.352	0.67	N 87 W	14.91	18.07	52.4	33.8	18.6	.140	3.7	0.2	2.7	.160	6.4
14	27.90	.111	72	.705	.594	0.38	N 61 W	14.06	14.63	32.8	26.0	6.8	...	...	*	0.3	*	0.3
15	...	...	...	...	...	...	S 86 E	9.24	10.10	34.2	21.5	12.7	...	...	...	...	...	...
16	39.00	.202	84	.496	.294	0.93	N 65 E	6.93	7.79	43.6	30.2	13.4	.120	2.5	...	...	.120	2.5
17	40.53	.175	68	.742	.568	0.37	N 73 W	18.77	18.92	50.2	37.0	13.2	...	...	...	...	...	...
18	33.90	.115	61	30.191	30.076	0.00	S 85 E	3.80	5.90	41.0	25.0	16.0	...	...	...	...	...	...
19	43.73	.179	63	29.860	29.681	0.62	N 47 W	6.59	7.05	50.2	28.2	22.0	.060	1.5	...	...	.060	1.5
20	44.88	.285	95	.490	.205	1.00	N 25 E	2.33	2.78	50.0	40.8	9.2	.100	4.0	...	...	.100	4.0
21	49.42	.298	84	.435	.137	1.00	N 11 E	7.83	8.75	53.3	42.5	10.8	.140	8.1	...	...	.140	8.1
22	...	...	...	...	...	...	N 25 W	12.88	13.27	44.2	37.5	6.7	.070	7.0	...	...	.070	7.0
23	36.98	.151	68	.616	.465	0.50	N 45 W	8.24	10.17	46.8	34.2	12.6	...	...	...	...	...	...
24	32.77	.143	77	.582	.439	0.97	N 75 W	15.24	15.83	41.8	28.8	13.0	...	...	*	2.7	*	2.7
25	33.85	.141	73	.524	.383	0.58	N 40 W	15.89	16.18	39.0	31.0	8.0	...	...	*	0.5	*	0.5
26	36.70	.151	69	.756	.605	0.60	N 46 W	10.03	10.22	45.0	29.0	16.0	...	...	...	...	...	...
27	40.87	.160	64	.881	.721	0.27	S 31 W	6.12	7.05	49.6	28.0	21.6	...	...	...	...	...	...
28	41.63	.193	73	.838	.645	0.00	N 79 E	4.11	5.62	51.0	32.8	18.2	...	...	...	...	...	...
29	...	...	...	...	...	...	N 67 E	3.97	4.50	54.2	35.0	19.2	...	...	...	...	...	...
30	50.72	.257	70	.577	.320	0.13	N 35 E	4.90	8.42	61.8	37.0	24.8	...	...	...	...	...	...
	39°.55	0.185	74	29.578	29.393	0.59	N 37° W	4.10	10.30	47°.04	32°.19	14°.84	1.282	40.6	0.3	7.2	1.312	47.8

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MAY, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	41°.30	0.201	77	29.710	29.510	0.98	N 36° W	11.65	11.82	47°.2	42°.0	5°.2	0.033	2.0	...	...	0.033	2.0
2	46 90	.260	79	.836	.576	0.45	N 30 W	4.40	7.40	57.0	32.5	24.5	...	...	...	...	...	...
3	53.58	.258	63	.714	.456	0.47	S 63 W	1.19	3.50	63 8	40.2	23.6	.015	2 5	...	...	.015	2.5
4	56.92	.318	69	.640	.322	0.12	S 37 W	2.20	3.90	69.0	47.8	21.2	...	...	...	...	...	...
5	56.13	.289	66	.628	.339	0.65	S 43 W	1.07	2.03	67.2	48 0	19.2	...	...	...	...	...	...
6	...	...	...	...	...	...	N 80 E	4.39	5.34	68.8	44.2	24.6	...	...	...	...	...	...
7	62 02	.449	79	.508	.059	0 73	N 63 W	2.96	3 82	73.2	50.3	22.9	.080	1.0	...	...	.080	1.0
8	59.78	.421	82	.515	.095	1.00	N 9 E	3.53	7.86	64.5	56 2	8.3	.935	6.0	...	...	.935	6.0
9	57 02	.414	89	.383	28.969	1.00	S 68 E	6.40	9 41	63.2	54.2	9.0	.205	4.3	...	...	.205	4.3
10	54.30	.381	90	.562	29.181	1.00	N 61 E	4.98	5.77	63 0	52.0	11.0	.055	5.8	...	...	.055	5.8
11	57.03	.391	84	.725	.334	0.93	N 49 E	8.89	9.11	62.5	50.8	11.7	...	...	...	...	...	...
12	58.45	.408	83	.752	.344	0.72	N 52 E	8.64	9.32	65.0	52.0	13.0	...	...	...	...	...	...
13	...	...	...	...	...	...	N 59 E	3.65	5.57	68.8	53 2	15.6	...	...	...	...	...	...
14	61.18	.366	67	.592	.226	0.15	S 82 E	1.15	4.70	70.0	52.4	17.6	...	...	...	...	...	...
15	56.12	.285	63	.662	.377	0.00	N 75 E	2.75	4.80	63.2	52 2	11.0	...	...	...	...	...	...
16	59.42	.295	59	.668	.372	0 00	N 65 E	5.46	7 32	67.0	46.6	20.4	...	...	...	...	...	...
17	55.03	.296	68	.720	424	0.43	N 56 E	8.28	9.68	60.0	49.0	11.0	.052	1.8	...	...	.052	1.8
18	54.05	.370	88	.426	.056	0.63	N 64 E	4.06	4 97	61.8	48.5	13.3	.147	1.3	...	...	147	1.3
19	52.25	.308	76	.160	28.852	0.72	N 72 W	15.78	16.52	60.1	49.0	11.1	.095	1.8	...	...	.095	1.8
20	...	...	...	...	...	...	N 36 W	4.56	10.54	53.0	37.0	16.0	.015	1.5	...	...	.015	1.5
21	41.50	.224	85	.419	29.195	1.00	N 55 E	11.49	11.77	44.6	38.8	5.8	.135	4.5	...	...	.135	4.5
22	51.43	.301	78	.581	.280	0.27	S 12 W	5.37	8.22	63 0	40.8	22.2	...	...	...	...	...	...
23	50.83	.276	75	.773	.498	0.05	S 27 E	1.14	3.37	61.8	41.0	20.8	...	...	...	...	...	...
24	54 58	.297	70	.686	.389	0.55	N 59 E	3.89	4.89	62.0	44.4	17.6	...	...	...	...	...	...
25	61.43	.328	62	.530	.202	0 53	N 57 E	7.23	7.76	69.2	52.0	17.2	.013	0.2	...	...	.013	0 2
26	59.40	.416	80	.301	28.885	0.42	N 1 W	4.59	8 83	71 0	49 8	21.2	.010	0.3	...	...	.010	0.3
27	...	...	...	...	...	...	N 55 W	4.78	6.17	65.6	50.2	15.4	...	...	...	...	...	...
28	57.02	.342	71	.540	29.197	0.27	S 82 W	1.95	4.56	67.5	47.0	20.5	...	...	...	...	...	...
29	59.47	.352	71	.572	.220	0.85	N 57 E	8.28	8.97	68.6	49.5	19.1	.005	0.3	...	...	.005	0 3
30	62 95	.451	79	.319	28.868	0.60	S 17 W	2.70	6 57	74.5	53.5	21.0	*	0.1	...	...	*	0.1
31	59.15	.430	85	.357	28.927	1.00	N 76 W	5.30	7.79	67.0	56.5	10.5	.020	2.7	...	...	.020	2.7
	55°.53	0.338	76	29.566	29.228	0.57	N 26° E	2.66	7.17	63°.97	47°.79	16°.18	1.815	36.1	...	...	1.815	36.1

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JUNE, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Cloudy Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	60°.83	0.314	60	29.542	29.228	0.48	N 36° W	12.95	12.98	71°.2	53°.4	17°.8	...	...	...	...	...	...
2	63.92	.294	50	.588	.294	0.17	West	3.40	5.82	75.5	54.8	20.7	...	...	...	...	...	...
3	...	...	...	...	...	...	S 30 W	5.37	5.66	71.8	50.2	21.6	...	...	...	...	...	...
4	57.93	.439	91	.002	28.562	1.00	N 58 E	3.77	4.83	66.0	56.8	9.2	0.375	5.0	...	...	0.375	5.0
5	60.98	.423	78	.114	28.691	0.78	N 36 W	12.06	12.13	66.0	57.0	9.0	*	*	...	...	*	*
6	57.85	.358	74	.195	28.837	0.63	N 86 E	4.81	7.13	66.0	54.4	11.6	.033	1.0	...	...	.033	1.0
7	58.08	.365	76	.138	28.773	0.67	S 72 W	5.40	6.65	71.0	53.3	17.7	.045	2.5	..	...	.045	2.5
8	56.18	.344	76	.197	28.853	0.85	N 74 W	15.95	16.84	62.5	49.2	13.3	.015	2.5	...	...	.015	2.5
9	57.32	.277	59	.411	29.134	0.48	N 41 W	20.44	20.61	65.0	52.0	13.0	...	...	...	...	...	...
10	...	..	...	...	...	...	N 39 W	14.56	14.71	68.0	49.2	18.8	...	...	...	...	...	...
11	67.15	.393	60	.538	.145	0.25	N 40 W	4.83	8.27	80.4	51.5	28.9	...	...	...	...	...	...
12	62.62	.371	65	.581	.210	0.03	N 74 E	2.66	4.10	70.8	53.0	17.8	...	..	...	...	...	...
13	63.85	.299	53	.607	.308	0.40	N 59 E	4.33	5.54	74.0	51.8	22.2	...	...	...	...	...	...
14	65.63	.395	64	.569	.175	0.42	N 88 W	2.49	5.00	78.8	52.8	26.0	.040	2.7	...	...	.040	2.7
15	64.95	.484	78	.589	.104	0.62	N 37 W	5.68	7.58	75.0	58.2	16.8	.295	4.0	...	...	.295	4.0
16	60.70	.400	75	.703	.303	0.70	N 19 W	7.79	7.85	66.5	54.0	12.5	...	...	...	...	...	...
17	...	...	...	...	...	...	S 36 W	2.53	3.44	76.0	56.4	19.6	...	...	...	...	...	...
18	64.58	.463	76	.504	.041	0.77	S 79 E	3.91	4.35	72.8	56.8	16.0	*	*	...	...	*	*
19	63.62	.482	81	.319	28.857	0.58	N 75 W	5.23	6.32	74.0	57.2	16.8	.475	2.0	...	...	.475	2.0
20	66.03	.461	73	.403	28.942	0.58	N 25 W	5.01	6.59	76.8	55.0	21.8	*	0.5	..	...	*	0.5
21	58.55	.434	88	.654	29.220	1.00	N 50 E	7.72	7.98	61.0	59.0	2.0	.005	3.1	...	...	.005	3.1
22	60.38	.333	64	.826	.493	0.40	N 79 E	4.35	5.24	69.2	55.5	13.7	...	...	...	...	...	...
23	63.75	.432	73	.814	.382	0.23	S 13 W	1.90	4.23	75.0	49.5	25.5	...	...	...	...	...	...
24	...	...	...	...	...	...	S 87 E	3.56	4.40	79.8	53.0	26.8	...	...	...	...	...	...
25	68.48	.512	74	.774	.262	0.97	S 14 W	3.98	4.86	78.2	58.0	20.2	...	...	...	...	...	...
26	68.80	.547	78	.731	.184	0.77	N 24 W	3.76	4.70	76.8	65.4	11.4	.063	4.0	...	...	.063	4.0
27	63.68	.381	65	.766	.385	0.13	N 84 E	5.29	5.58	69.8	60.2	9.6	...	...	...	...	...	...
28	71.23	.557	73	.517	28.960	0.57	S 16 W	7.02	7.96	81.6	54.0	27.6	.040	0.5	...	...	.040	0.5
29	69.40	.624	86	.306	28.682	0.90	S 81 W	7.70	8.48	79.0	68.4	10.6	.750	7.0	...	...	.750	7.0
30	65.70	.371	58	.554	29.184	0.63	N 72 W	6.63	8.56	78.8	60.0	18.8	...	...	...	...	...	...
	63°.16	0.414	71	29.498	29.084	0.58	N 44° W	3.13	7.61	72°.58	55°.33	17°.24	2.136	34.8	...	...	2.136	34.8

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JULY, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles.									
1	...	...	...	...	...	...	N 57° E	2.63	6.60	69°.2	59°.2	10°.0	...	...	...	...	...	...
2	65.27	0.456	73	29.655	29.199	0.53	S 9 E	2.63	3.84	73.0	54.2	18.8	...	...	...	...	...	...
3	63.67	.498	84	.498	.000	1.00	N 56 E	4.01	5.40	68.2	60.0	8.2	.115	2.0	...	...	0.115	2.0
4	61.98	.499	90	.347	28.848	1.00	N 53 E	7.53	9.28	69.4	60.5	8.9	.870	14.5	...	...	.870	14.5
5	61.57	.416	77	.405	28.989	0.80	N 6 E	5.03	7.52	72.0	54.7	17.3	.005	1.0	...	...	.005	1.0
6	61.52	.348	64	.640	29.292	0.30	N 66 E	5.39	6.53	68.5	53.7	14.8	...	...	...	...	...	...
7	65.78	.408	65	.611	.203	0.05	S 71 E	4.03	5.50	73.6	52.5	21.1	...	...	...	...	...	...
8	...	...	...	...	...	...	S 30 E	4.03	6.65	71.4	58.0	13.4	.480	7.0	...	...	.480	7.0
9	65.33	.499	79	.364	28.865	0.28	S 88 W	12.19	12.43	72.8	63.2	9.6	...	...	...	...	...	...
10	59.67	.408	79	.617	29.209	0.58	N 52 W	3.67	5.15	70.5	52.2	18.3	...	...	...	...	...	...
11	58.88	.314	63	.795	.481	0.22	N 40 W	4.75	8.07	68.0	49.6	18.4	...	...	...	...	...	...
12	62.42	.348	63	.818	.470	0.27	N 27 W	8.52	8.72	70.4	50.2	20.2	...	...	...	...	...	...
13	63.75	.441	75	.747	.306	0.05	S 36 W	1.76	3.93	72.5	52.5	20.0	...	...	...	...	...	...
14	64.70	.446	74	.673	.227	0.05	S 17 W	5.41	6.52	77.0	52.0	25.0	...	...	...	...	...	...
15	...	...	...	...	...	...	S 42 W	3.46	4.81	77.0	55.6	21.4	.075	2.0	...	...	.075	2.0
16	68.38	.482	72	.493	.011	0.40	N 65 W	8.75	11.49	83.8	63.2	20.6	.013	1.5	...	...	.013	1.5
17	62.85	.417	74	.654	.237	0.12	S 7 W	3.46	4.45	72.5	53.0	19.5	...	...	...	...	...	...
18	63.18	.521	89	.525	.005	0.73	S 45 E	2.57	4.35	71.2	55.0	16.2	.510	8.3	...	...	.510	8.3
19	75.00	.585	70	.486	28.901	0.47	N 80 W	7.89	8.93	88.0	62.7	25.3	...	...	...	...	...	...
20	69.58	.470	66	.499	29.029	0.48	S 44 W	4.35	4.97	81.8	61.9	19.9	...	...	...	...	...	...
21	66.93	.442	64	.324	28.881	0.32	N 58 W	14.70	15.47	76.0	62.2	13.8	.475	1.0	...	...	.475	1.0
22	...	...	...	...	...	...	S 73 E	3.59	5.12	70.0	54.2	15.8	*	0.1	...	...	*	0.1
23	57.68	.323	66	.384	29.061	0.30	N 60 W	12.52	13.23	68.5	53.0	15.5	...	...	...	...	...	...
24	63.25	.323	57	.532	.209	0.77	S 75 W	8.66	9.53	74.5	43.8	30.7	...	...	...	...	...	...
25	63.20	.417	71	.644	.227	0.43	S 11 E	2.39	4.06	70.8	52.5	18.3	...	...	...	...	...	...
26	67.37	.535	80	.538	.003	0.70	N 62 W	5.58	7.87	78.6	60.0	18.6	.160	1.7	...	...	.160	1.7
27	60.00	.330	64	.735	.405	0.07	S 45 E	1.23	6.35	66.0	55.0	11.0	...	...	...	...	...	...
28	62.43	.343	62	.679	.336	0.65	N 61 E	6.73	7.28	67.5	49.0	18.5	.655	5.0	...	...	.655	5.0
29	...	...	...	...	...	...	N 39 W	4.07	7.27	74.0	61.2	12.8	.935	4.0	...	...	.935	4.0
30	66.38	.500	77	.460	28.960	0.53	S 57 W	1.99	2.93	74.0	54.8	19.2	.043	0.3	...	...	.043	0.3
31	61.27	.346	64	.542	29.195	0.18	N 36 W	11.44	11.68	72.0	61.6	10.4	...	...	...	...	...	...
	63°.92	0.427	72	29.564	29.137	0.43	N 60° W	2.15	7.29	72°.99	55°.85	17°.15	4.336	48.4	...	...	4.336	48.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—AUGUST, 1860.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	59.98	0.333	66	29.738	29.405	0.30	S 10 W	3.67	4.90	68.2	48.0	26.2	...	...	...	...	...	...
2	62.67	.461	81	.728	.267	0.25	N 81 E	1.47	4.16	71.0	49.8	21.2	...	...	...	...	...	...
3	65.08	.543	87	.529	28.986	0.87	S 25 E	1.79	4.58	68.5	60.0	8.5	0.125	2.5	...	...	0.125	2.5
4	71.85	.522	70	.533	29.011	0.33	N 74 W	7.79	8.85	83.2	62.8	20.4	...	...	...	...	...	...
5	...	...	...	...	...	...	N 81 E	4.01	4.62	73.8	59.8	14.0	...	...	...	...	...	...
6	67.83	.560	82	.606	.046	0.13	S 88 E	2.25	2.36	75.4	58.5	16.9	...	...	...	...	...	...
7	73.82	.698	84	.464	28.766	0.80	N 74 W	2.74	4.39	84.6	65.2	19.4	*	0.6	+	...	*	0.6
8	72.08	.476	62	.456	28.980	0.30	N 83 W	3.56	6.16	87.0	67.0	20.0	.265	1.5	...	...	.265	1.5
9	67.87	.529	78	.485	28.956	0.40	S 43 W	3.56	4.27	76.8	62.1	14.7	.035	0.3	...	...	.035	0.3
10	65.08	.463	72	.513	29.050	0.68	N 65 W	7.14	10.41	79.8	57.5	22.3	...	...	...	...	...	...
11	58.42	.339	69	.691	.351	0.05	S 22 E	1.55	6.09	73.4	49.0	24.4	...	...	...	...	...	...
12	...	...	...	...	...	...	N 9 W	2.60	6.39	73.5	49.4	24.1	.675	10.0	...	...	.675	10.0
13	57.32	.346	75	.596	.250	0.63	N 36 W	10.22	10.28	66.0	53.6	12.4	.185	5.5	...	...	.185	5.5
14	56.47	.366	79	.805	.439	0.20	N 21 W	4.56	6.33	64.4	50.0	14.4	...	...	...	...	...	...
15	59.23	.384	76	.879	.495	0.27	S 18 E	3.14	4.49	67.6	48.0	19.6	...	...	...	...	...	...
16	60.07	.403	78	.780	.377	0.57	S 68 E	3.48	4.34	68.0	51.0	17.0	...	...	...	...	...	...
17	66.03	.461	73	.603	.142	0.47	N 82 W	0.69	3.93	74.5	53.5	21.0	.127	1.8	...	...	.127	1.8
18	68.73	.535	75	.499	28.964	0.28	N 47 W	3.15	5.53	78.0	61.2	16.8	...	...	...	...	...	...
19	...	...	...	...	...	...	S 70 W	2.45	3.04	75.4	59.2	16.2	.303	3.7	...	...	.303	3.7
20	68.85	.551	79	.576	29.025	0.73	N 85 W	1.99	4.20	80.6	64.8	15.8	...	...	...	...	...	...
21	67.47	.529	79	.661	.132	0.60	S 86 W	1.27	4.66	75.5	59.2	16.3	...	...	...	...	...	...
22	65.98	.453	71	.671	.218	0.10	N 79 E	3.33	4.66	73.0	56.8	16.2	...	...	...	...	...	...
23	71.02	.601	80	.533	28.931	0.62	N 71 E	3.96	6.37	77.6	61.2	16.4	.890	2.3	...	...	.890	2.3
24	66.08	.557	87	.422	28.865	0.77	N 15 W	0.87	4.94	73.2	62.0	11.2	.350	6.2	...	...	.350	6.2
25	64.80	.478	78	.409	28.931	0.82	N 53 W	11.58	11.67	71.8	61.6	10.2	...	...	...	...	...	...
26	...	...	...	...	...	...	N 50 W	3.24	4.55	73.0	53.8	19.2	*	*	...	...	*	*
27	58.80	.365	74	.500	29.135	0.30	N 81 W	8.28	9.20	68.4	54.0	14.4	.062	1.0	...	...	.062	1.0
28	56.67	.306	67	.603	.297	0.23	N 53 W	2.96	4.13	67.0	46.8	20.2	...	...	...	...	...	...
29	60.58	.358	68	.648	.290	0.05	S 20 W	3.70	4.26	69.5	52.0	17.5	...	...	...	...	...	...
30	64.83	.489	79	.401	28.912	0.42	S 49 W	4.98	7.82	73.4	49.5	23.9	.375	3.2	...	...	.375	3.2
31	62.78	.403	72	.399	28.996	0.40	N 63 W	6.93	8.29	73.5	57.0	16.5	.013	1.8	...	...	.013	1.8
	64.46	0.463	76	29.582	29.119	0.43	N 70 W	1.83	5.80	73.73	56.26	17.46	3.405	40.4	...	...	3.405	40.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—SEPTEMBER, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	54°.43	0.255	62	29.650	29.395	0.05	N 36° W	7.86	8.06	64°.2	50°.8	13°.4	...	...	...	...	...	...
2	...	...	...	...	...	...	S 27 W	1.73	2.64	65.8	45.2	20.6	...	...	...	...	...	...
3	59.47	.386	76	.881	.495	0.00	N 65 E	4.65	4.93	66.6	45.8	20.8	...	...	...	...	...	...
4	65.07	.532	84	.735	.203	0.83	S 23 E	2.63	2.83	72.2	54.0	18.2	*	0.2	...	...	*	0.2
5	69.75	.617	85	.674	.056	0.85	N 48 W	2.21	5.45	75.8	62.6	13.2	*	*	...	...	*	*
6	66.15	.429	67	.725	.296	0.38	N 35 W	1.45	4.33	74.2	64.5	9.7	...	...	...	...	...	...
7	66.57	.492	75	.592	.100	0.77	N 43 E	1.37	3.45	72.5	55.8	16.7	.020	1.8	...	...	.020	1.8
8	54.13	.360	83	.683	.323	0.82	N 9 E	6.77	7.09	66.0	52.2	13.8	.520	7.5	...	...	.520	7.5
9	...	...	...	...	...	...	N 24 W	4.54	5.77	62.2	45.2	17.0	...	...	...	...	...	...
10	53.93	.293	71	.654	.360	0.60	S 64 W	3.32	4.92	62.8	46.0	16.8	...	...	...	...	...	...
11	49.60	.284	77	.522	.238	0.38	N 59 W	8.39	10.92	59.0	44.8	14.2	.170	5.2	...	...	.170	5.2
12	46.37	.191	62	.753	.562	0.42	N 39 W	10.47	10.55	52.8	39.0	13.8	...	...	...	...	...	...
13	54.00	.270	66	.851	.582	0.07	N 67 W	3.80	3.91	67.0	38.8	28.2	...	...	...	...	...	...
14	59.62	.378	76	.867	.489	0.30	S 3 W	3.59	3.67	70.8	45.7	25.1	...	...	...	...	...	...
15	63.92	.473	79	.712	.239	0.22	S 18 W	5.54	5.64	72.0	49.2	22.8	.610	2.5	...	...	.610	2.5
16	...	...	...	...	...	...	S 29 W	4.30	4.65	65.5	62.3	3.2	.057	5.0	...	...	.057	5.0
17	57.85	.386	80	.616	.230	0.30	S 80 W	1.63	1.87	68.0	51.5	16.5	...	...	...	...	...	...
18	57.07	.372	80	.703	.331	0.03	S 79 E	0.75	1.05	65.2	48.9	16.3	...	...	...	...	...	...
19	60.98	.462	86	.579	.117	0.75	N 16 W	2.13	2.59	69.2	51.2	18.0	...	...	...	...	...	...
20	53.42	.363	88	.394	.031	0.68	N 73 W	6.20	7.76	60.2	55.8	4.4	.060	4.0	...	...	.060	4.0
21	47.80	.239	74	.526	.287	0.25	S 80 W	7.96	8.46	59.4	41.6	17.8	*	0.2	...	...	*	0.2
22	55.98	.321	73	.511	.190	0.55	S 60 W	7.36	8.77	66.8	40.6	26.2	.017	1.8	...	...	.017	1.8
23	...	...	...	...	...	...	N 81 E	4.21	4.57	57.8	39.2	18.6	...	...	...	...	...	...
24	58.68	.384	78	.367	28.983	0.95	S 48 W	5.72	6.20	63.0	50.0	13.0	.130	4.1	...	...	.130	4.1
25	53.32	.279	69	.343	29.064	0.40	N 86 W	11.82	12.29	64.0	50.8	13.2	.005	0.2	...	...	.005	0.2
26	47.06	.204	66	.775	.571	0.53	N 76 W	8.89	8.96	56.5	41.6	14.9	...	...	...	...	...	...
27	46.00	.244	79	.769	.525	0.80	N 74 W	3.03	4.70	52.0	41.4	10.6	.080	1.2	...	...	.080	1.2
28	42.47	.175	64	.890	.715	0.43	N 44 W	10.49	10.68	52.0	40.2	11.8	...	...	...	...	...	...
29	39.90	.151	61	30.061	.910	0.58	S 12 W	1.09	1.88	45.2	35.2	10.0	...	...	...	...	...	...
30	...	...	...	...	...	...	N 74 E	4.75	5.13	44.8	28.7	16.1	.290	2.5	...	...	.290	2.5
	55°.34	0.342	74	29.673	29.332	0.48	N 71° W	2.63	5.79	63°.12	47°.29	15°.83	1.959	36.2	...	...	1.959	36.2

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—OCTOBER, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	47°.20	0.301	92	29.672	29.371	1.00	N 44° E	1.42	2.38	49°.8	37°.2	12°.6	0.325	7.5	...	...	.325	7.5
2	50.25	.307	85	.766	.459	1.00	N 27 W	1.11	1.11	54.2	46.4	7.8	...	...	...	...	...	...
3	53.93	.320	77	.846	.526	0.80	S 84 E	2.19	4.88	59.2	49.4	9.8	.040	6.5	...	...	.040	6.5
4	54.60	.380	89	.671	.291	1.00	S 63 E	1.09	1.14	59.0	50.2	8.8	.005	3.5	...	...	.005	3.5
5	52.97	.306	76	.722	.416	0.43	N 29 W	8.42	9.08	64.0	52.0	12.0	...	...	...	...	...	...
6	37.77	.176	78	.870	.693	0.02	N 78 W	0.87	4.20	53.0	29.8	23.2	...	...	...	...	...	...
7	...	...	...	...	...	...	N 81 E	1.31	2.78	53.2	33.8	19.4	.115	4.2	...	...	.115	4.2
8	46.68	.227	70	.235	.007	0.75	N 46 W	17.87	18.13	52.6	45.0	7.6	...	...	...	...	...	...
9	42.97	.224	80	.301	.077	0.97	N 79 W	5.42	5.51	48.0	38.0	10.0	*	0.2	...	...	*	0.2
10	51.80	.303	77	.144	28.841	0.73	S 39 W	10.02	11.28	59.2	40.2	19.0	...	...	...	...	...	...
11	42.27	.178	65	.430	29.253	0.47	N 59 W	11.07	11.38	51.5	45.7	5.8	...	...	...	...	...	...
12	37.45	.158	71	.711	.553	0.42	N 86 W	7.01	7.27	45.8	28.4	17.4	*	0.5	...	...	*	0.5
13	39.33	.176	73	.821	.645	0.42	N 39 W	1.57	5.37	46.2	30.5	15.7	...	...	*	0.2	*	0.2
14	...	...	...	...	...	...	N 24 E	4.23	6.27	48.5	38.0	10.5	...	...	...	...	...	...
15	41.57	.198	75	.758	.560	0.63	S 82 W	4.75	6.38	49.2	37.5	11.7	...	...	...	...	...	...
16	47.98	.271	79	.586	.316	0.63	S 75 W	3.94	10.29	55.2	35.0	20.2	.190	4.8	...	...	.190	4.8
17	43.42	.199	71	.858	.659	0.68	N 7 E	10.69	10.83	49.0	40.2	8.8	...	...	...	...	...	...
18	44.20	.229	79	.961	.732	1.00	N 20 E	3.80	3.91	49.0	39.0	10.0	...	...	...	...	...	...
19	47.08	.261	81	.891	.630	0.62	N 10 E	4.29	6.23	53.0	39.0	14.0	...	...	...	...	...	...
20	47.50	.246	75	.798	.552	1.00	N 47 E	11.20	11.37	52.5	44.8	7.7	.173	7.5	...	...	.173	7.5
21	...	...	...	...	...	...	N 70 E	12.08	12.13	51.5	44.5	7.0	.220	8.5	...	...	.220	8.5
22	49.20	.339	97	.615	.276	1.00	N 85 E	6.41	6.45	51.4	48.0	3.4	.115	2.8	...	...	.115	2.8
23	49.18	.335	96	.490	.155	1.00	S 77 E	1.83	3.12	52.8	48.0	4.8	.095	9.3	...	...	.095	9.3
24	48.45	.300	87	.540	.240	0.62	S 75 W	2.72	3.10	55.0	43.4	11.6	.105	3.1	...	...	.105	3.1
25	48.65	.294	86	.530	.236	0.73	N 70 W	1.98	5.33	55.1	38.8	16.3	...	...	...	...	...	...
26	43.02	.223	80	.746	.523	0.13	N 41 W	6.90	7.28	51.0	41.0	10.0	...	...	...	...	...	...
27	42.70	.233	83	.910	.676	0.77	N 74 E	11.10	11.66	48.2	33.8	14.4	...	...	...	...	...	...
28	...	...	...	...	...	...	S 69 E	5.45	9.21	55.5	44.0	11.5	.225	7.5	...	...	.225	7.5
29	52.13	.341	87	.799	.458	0.50	S 84 W	3.78	6.12	60.0	51.5	8.5	...	...	...	...	...	...
30	55.55	.393	89	.743	.350	0.50	N 88 E	5.21	5.81	62.4	44.0	18.4	.010	0.5	...	...	.010	0.5
31	58.03	.415	87	.706	.291	1.00	N 33 W	0.63	4.84	68.0	52.0	16.0	*	0.2	...	...	*	0.2
	47°.25	0.272	81	29.671	29.399	0.70	N 9° W	2.00	6.93	53°.65	41°.58	12°.06	1.618	66.6	*	0.2	1.618	66.8

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—NOVEMBER, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	58°.88	0.434	87	29.777	29.343	0.60	N 55° E	10.77	11.71	64°.5	53°.2	11°.3	...	...	...	...	...	...
2	57.37	.373	79	.722	.349	0.70	N 78 E	15.52	16.36	60.2	57.2	3.0	0.125	4.2	...	...	0.125	4.2
3	51.02	.347	92	.482	.135	1.00	S 7 E	3.71	8.43	54.0	51.0	3.0	.412	8.0	...	...	.412	8.0
4	...	...	...	...	...	...	S 56 W	15.05	15.35	49.0	40.8	8.2	.050	0.5	*	*	.050	0.5
5	40.87	.155	61	.424	.269	0.85	S 67 W	9.02	9.10	46.8	39.9	6.9	...	...	...	...	...	...
6	36.33	.158	73	.577	.419	0.35	N 81 W	7.81	8.45	44.2	31.8	12.4	...	...	...	...	...	...
7	33.67	.149	78	.817	.668	0.33	N 63 W	7.66	8.04	40.4	29.0	11.4	...	...	...	...	...	...
8	34.30	.152	77	.854	.702	0.55	N 40 E	3.28	4.35	40.2	30.5	9.7	...	...	...	...	...	...
9	38.95	.203	85	.517	.314	0.97	N 50 E	14.93	15.14	43.5	31.2	12.3	.818	14.0	...	...	.818	14.0
10	39.45	.219	90	.270	.051	1.00	N 13 W	11.15	11.98	40.5	38.2	2.3	.065	9.5	...	...	.065	9.5
11	...	...	...	...	...	...	N 30 W	9.07	9.17	45.4	38.0	7.4	...	...	...	...	...	...
12	41.28	.191	74	.492	.301	0.28	N 33 W	10.37	10.48	49.5	37.0	12.5	...	...	...	...	...	...
13	39.45	.199	82	.739	.540	0.33	N 29 W	7.36	7.45	47.2	33.8	13.4	...	...	...	...	...	...
14	38.97	.190	78	.814	.624	0.08	N 72 W	3.14	4.16	48.0	30.5	17.5	...	...	...	...	...	...
15	39.32	.204	85	.834	.630	0.82	N 31 W	5.59	5.65	47.8	32.5	15.3	...	...	...	...	...	...
16	40.58	.213	84	.794	.581	1.00	N 36 E	1.91	2.19	43.4	37.0	6.4	...	...	...	...	...	...
17	43.22	.264	94	.433	.169	1.00	N 14 W	2.49	3.12	45.5	41.0	4.5	.150	9.5	...	...	.150	9.5
18	...	...	...	...	...	...	S 43 W	12.61	13.37	42.0	38.5	3.5	.055	4.5	...	...	.055	4.5
19	39.33	.176	71	28.957	28.781	0.85	S 69 W	13.15	13.36	43.6	39.2	4.4	...	...	...	...	...	...
20	32.25	.136	75	29.307	29.171	0.40	N 81 W	13.68	13.90	39.4	33.0	6.4	...	...	*	0.2	*	0.2
21	30.45	.140	83	.523	.383	0.95	S 89 W	8.72	8.88	36.2	24.0	12.2	...	...	*	0.1	*	0.1
22	36.33	.166	78	.587	.421	0.92	S 27 W	13.27	14.87	40.0	30.2	9.8	.200	5.5	...	...	.200	5.5
23	39.17	.213	89	.204	28.991	1.00	S 38 W	14.45	15.31	40.7	33.8	6.9	.132	9.2	*	1.0	.132	10.2
24	17.93	.074	74	.174	29.100	0.75	S 67 W	27.40	27.45	27.5	15.6	11.9	...	...	*	4.0	*	4.0
25	...	...	...	...	...	...	S 74 W	18.38	18.40	20.2	13.2	7.0	...	...	...	...	...	...
26	26.97	.138	88	.711	.573	0.83	S 12 E	9.04	11.56	41.0	16.0	25.0	.180	6.5	1.5	8.0	.330	14.5
27	33.87	.157	78	.611	.453	0.60	S 83 W	13.74	14.21	41.0	26.2	14.8	...	...	...	...	...	...
28	28.82	.113	71	.695	.582	0.28	S 60 W	4.94	5.34	34.8	23.0	11.8	...	...	...	...	...	...
29	36.27	.162	76	.268	.106	0.85	S 46 W	7.36	7.47	43.2	27.0	16.2	.290	4.5	*	0.1	.290	4.6
30	31.60	.153	83	.003	28.851	1.00	N 34 W	15.18	15.39	37.2	33.5	3.7	.092	6.5	0.4	7.5	.132	14.0
	37°.95	0.195	80	29.523	29.327	0.70	S 89° W	4.95	11.02	43°.23	33°.53	9°.70	2.569	82.4	1.9	20.9	2.759	103.3

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—DECEMBER, 1860.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	23°.28	0.101	81	29.242	29.140	1.00	N 53° W	20.47	20.73	25°.2	21°.2	4°.0	...	...	0.1	3.0	0.010	3.0
2	...	...	...	...	...	...	N 75 W	14.65	14.79	30.8	21.8	9.0	...	...	*	0.2	*	0.2
3	31.22	.155	88	.575	.420	1.00	N 78 W	5.24	6.76	33.0	28.8	4.2	...	...	*	3.0	*	3.0
4	28.38	.135	87	.488	.353	1.00	N 6 W	7.69	7.89	31.8	28.0	3.8	...	...	0.1	7.0	.010	7.0
5	23.70	.115	90	.402	.287	0.88	N 53 W	5.86	6.35	30.0	21.9	8.1	...	...	*	0.2	*	0.2
6	26.25	.129	90	.307	.178	0.83	S 44 W	6.04	6.36	30.4	23.0	7.4	...	...	1.0	8.8	.100	8.8
7	30.32	.139	83	.574	.435	0.52	N 31 W	4.96	8.53	36.0	23.7	12.3	...	...	...	...	...	...
8	24.92	.117	87	.852	.735	0.83	N 1 W	3.60	5.83	30.0	24.0	6.0	...	...	...	...	...	...
9	...	...	...	...	...	...	S 68 W	2.95	5.56	35.2	24.2	11.0	...	...	1.5	2.0	.150	2.0
10	31.20	.165	94	.239	.074	1.00	N 20 W	6.93	9.57	34.2	31.4	2.8	...	...	4.5	12.0	.450	12.0
11	20.75	.084	74	.501	.417	0.70	S 82 W	11.37	14.18	29.0	19.5	9.5	...	...	*	2.0	*	2.0
12	25.20	.108	79	.174	.066	0.82	S 69 W	18.75	19.04	28.0	13.0	15.0	...	...	0.2	2.0	.020	2.0
13	11.25	.063	84	.580	.517	0.12	N 68 W	11.73	12.75	17.6	13.5	4.1	...	...	0.1	0.5	.010	0.5
14	1.08	.037	79	30.189	30.152	0.18	N 8 W	5.30	5.63	9.0	−7.0	16.0	...	...	0.2	3.0	.020	3.0
15	13.20	.061	78	29.989	29.928	0.60	N 56 E	1.45	6.18	24.0	1.3	22.7	...	...	...	...	...	...
16	...	...	...	...	...	...	S 60 W	8.47	8.52	34.5	11.0	23.5	...	...	...	...	...	...
17	23.98	.105	81	30.049	.944	1.00	N 28 E	6.89	7.89	26.0	21.4	4.6	...	...	*	1.0	*	1.0
18	24.92	.119	87	30.029	.910	1.00	N 75 E	17.45	17.70	33.8	19.0	14.8	...	...	0.5	3.5	.050	3.5
19	35.45	.196	95	29.434	.238	1.00	S 84 E	8.78	8.98	37.8	23.5	14.3	1.265	19.5	...	...	1.265	19.5
20	37.05	.178	80	28.997	28.820	0.95	S 89 W	11.05	13.23	39.0	35.2	3.8	.047	3.5	...	...	.047	3.5
21	28.27	.136	87	29.236	29.100	0.88	N 9 W	8.34	10.17	31.2	27.5	3.7	...	...	5.0	9.7	.500	9.7
22	21.15	.094	82	.490	.396	0.93	N 86 W	10.02	10.48	25.8	21.4	4.4	...	...	*	1.0	*	1.0
23	...	...	...	...	...	...	N 82 W	5.58	5.59	22.5	10.4	12.1	...	...	...	...	...	...
24	18.30	.084	84	.960	.876	0.75	N 61 W	6.49	7.12	24.4	13.8	10.6	...	...	...	...	...	...
25	...	...	...	...	...	...	N 16 W	9.53	9.74	23.7	15.4	8.3	...	...	*	1.0	*	1.0
26	23.88	.110	85	30.058	.948	0.90	N 42 W	10.23	10.27	28.0	19.0	9.0	...	...	*	1.0	*	1.0
27	25.80	.121	86	30.189	30.068	1.00	N 37 W	7.80	8.28	28.8	23.5	5.3	...	...	...	...	...	...
28	21.70	.101	86	30.170	30.069	0.95	N 66 E	9.15	10.64	28.0	18.0	10.0	...	...	...	...	...	...
29	31.03	.150	86	29.880	29.730	1.00	S 20 E	9.21	13.64	34.2	18.2	16.0	.050	1.0	0.2	4.0	.070	5.0
30	...	...	...	...	...	...	S 73 W	10.79	11.01	25.0	16.0	9.0	...	...	*	0.5	*	0.5
31	17.82	.076	79	30.062	.986	0.83	S 66 W	10.91	11.05	25.5	15.0	10.5	...	...	0.1	3.0	.010	3.0
	24°.00	0.115	84	29.667	29.551	0.83	N 62° W	4.66	10.14	28°.79	19°.25	9°.54	1.362	24.0	13.5	68.4	2.712	92.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JANUARY, 1861.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	27°.60	0.109	72	29.781	29.672	0.97	S 62° W	8.80	8.88	30°.2	15°.0	15°.2	...	...	...	...	...	...
2	28.75	.140	88	.708	.568	0.97	N 29 W	2.45	7.03	32.0	25.0	7.0	...	...	...	...	...	...
3	15.12	.075	86	.635	.560	0.70	N 17 W	8.15	8.33	18.0	16.0	2.0	...	...	*	1.5	*	1.5
4	17.17	.081	84	.703	.622	0.60	S 71 W	9.91	11.13	22.2	9.3	12.9	...	...	*	0.5	*	0.5
5	19.08	.089	85	.854	.765	0.83	S 66 W	9.68	9.96	24.0	14.0	10.0	...	...	*	1.5	*	1.5
6	...	...	...	...	...	...	S 81 E	3.74	5.35	32.0	18.0	14.0	...	...	1.0	12.0	.100	12.0
7	23.00	.118	94	.417	.299	0.85	N 21 E	5.66	7.60	29.4	23.0	6.4	0.050	2.0	3.0	8.0	.350	10.0
8	21.42	.103	90	.716	.613	0.95	N 12 W	3.03	3.20	24.5	17.0	7.5	...	...	0.5	3.5	.050	3.5
9	22.43	.107	89	.419	.312	1.00	N 12 E	3.89	6.21	25.0	18.5	6.5	...	...	0.1	3.5	.010	3.5
10	11.63	.071	87	.455	.385	0.38	N 47 W	12.42	13.83	23.2	15.6	7.6	...	...	*	1.0	*	1.0
11	0.12	.043	94	.601	.558	1.00	N 18 E	11.87	12.71	4.0	–4.8	8.8	...	...	4.0	18.0	.400	18.0
12	–4.15	.032	89	.904	.872	0.28	N 16 W	7.16	7.25	–1.2	–7.0	5.8	...	...	...	...	...	...
13	...	...	...	...	...	...	N 64 E	1.93	14.78	14.0	–11.2	25.2	...	...	*	1.0	*	1.0
14	22.67	.113	90	.718	.605	0.92	N 38 E	5.86	6.55	27.3	8.0	19.3	...	...	*	2.0	*	2.0
15	27.38	.140	94	.551	.411	1.00	N 63 E	13.75	13.86	29.8	20.5	9.3	.140	7.0	*	0.7	.140	7.7
16	32.53	.181	98	.116	28.935	1.00	S 10 E	1.25	11.19	35.5	24.8	10.7	.475	4.0	*	0.5	.475	4.5
17	26.60	.128	88	.703	29.575	1.00	N 49 W	6.29	7.53	30.0	26.2	3.8	...	...	*	0.5	*	0.5
18	28.02	.145	94	.415	.271	1.00	N 39 E	4.41	12.37	37.0	24.0	13.0	...	...	3.0	7.2	.300	7.2
19	29.88	.147	87	.360	.213	1.00	S 16 W	16.31	16.42	32.2	26.8	5.4	...	...	0.1	2.4	.010	2.4
20	...	...	...	...	...	...	N 85 W	7.55	7.62	23.5	20.4	3.1	...	...	0.1	1.5	.010	1.5
21	12.45	.066	85	.956	.890	0.02	S 73 W	5.21	5.44	22.0	6.0	16.0	...	...	...	...	...	...
22	7.47	.055	86	30.272	30.217	0.00	N 70 W	2.60	2.73	18.0	–2.6	20.6	...	...	...	...	...	...
23	21.52	.100	83	30.176	30.076	0.95	...	...	14.40	30.0	6.7	23.3	...	...	1.0	2.5	.100	2.5
24	30.38	.161	95	29.530	29.369	0.68	S 5 W	5.06	15.37	33.8	24.2	9.6	.020	1.5	6.0	10.0	.620	11.5
25	15.03	.067	75	.699	.632	0.30	S 65 W	9.81	9.88	24.2	14.7	9.5	...	...	...	...	...	...
26	11.25	.065	85	.796	.730	0.68	N 77 W	2.95	3.25	21.0	1.7	19.3	...	...	...	...	...	...
27	...	...	...	...	...	...	S 32 W	6.77	7.66	30.0	8.5	21.5	...	...	0.2	4.2	.020	4.2
28	25.37	.112	82	.584	.471	0.77	S 33 W	9.07	10.45	30.2	21.0	9.2	...	...	1.2	6.5	.120	6.5
29	28.45	.146	91	.260	.115	0.97	S 75 W	13.97	15.21	35.0	24.5	10.5	...	...	0.4	3.6	.040	3.6
30	19.35	.093	87	.614	.522	0.67	S 71 W	13.24	14.10	24.8	13.0	11.8	...	...	*	1.5	*	1.5
31	15.75	.078	88	.653	.575	0.98	S 60 W	7.80	7.83	17.6	15.0	2.6	...	...	...	...	...	...
	19°.86	0.102	88	29.652	29.549	0.76	N 86° W	2.92	9.30	25°.14	13°.93	11°.21	0.685	14.5	20.6	93.6	2.745	108.1

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—FEBRUARY, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles	Miles.									
1	20.50	0.111	93	29.462	29.351	0.90	N 76 E	7.50	8.09	33.2	5.0	28.2	...	...	7.0	10.5	0.700	10.5
2	26.15	.135	92	.372	.237	1.00	N 52 W	11.63	11.86	30.4	22.7	7.7	...	...	...	...	...	...
3	...	...	...	...	...	...	S 85 W	5.30	7.19	22.4	9.3	13.1	...	...	...	...	...	...
4	26.83	.131	89	.837	.706	0.95	S 59 W	7.24	7.63	31.4	12.1	19.3	...	...	*	*	*	*
5	26.67	.126	87	.664	.538	0.83	S 57 W	7.88	8.19	30.2	25.6	4.6	...	...	0.1	2.5	.010	2.5
6	24.55	.105	77	.240	.135	0.88	N 88 W	9.27	16.16	35.0	22.8	12.2	...	...	2.0	3.8	.200	3.8
7	–7.72	.030	81	.529	.499	0.75	N 44 W	19.07	19.76	9.0	–9.8	18.8	...	...	8.0	5.1	.800	5.1
8	–5.23	.033	90	30.100	30.067	0.92	N 60 W	3.91	6.39	8.2	–20.8	29.0	...	...	0.5	4.0	.050	4.0
9	18.10	.090	89	29.960	29.860	1.00	N 70 E	6.96	7.62	29.8	–2.6	32.4	...	...	*	3.0	*	3.0
10	...	...	...	...	...	...	N 49 E	3.51	3.97	43.0	16.9	26.1	...	...	...	...	...	...
11	41.52	.250	95	.395	.145	0.97	N 50 E	3.05	4.08	44.6	37.6	7.0	.300	7.0	...	...	.300	7.0
12	33.70	.168	86	.266	.099	0.88	S 57 W	12.49	13.39	39.0	34.0	5.0	...	...	0.2	4.5	.020	4.5
13	30.28	.145	86	.753	.607	0.55	N 55 W	9.38	12.37	34.2	29.6	4.6	...	...	...	...	...	...
14	28.85	.131	82	.662	.531	1.00	N 63 E	19.85	20.06	32.0	25.0	7.0	.045	4.5	1.0	7.0	.145	11.5
15	32.05	.176	97	.108	28.932	1.00	S 76 E	1.62	10.34	33.4	28.2	5.2	...	...	6.0	14.5	.600	14.5
16	31.27	.140	79	.214	29.074	0.37	S 58 W	6.85	8.22	34.8	31.0	3.8	...	...	0.3	8.0	.030	8.0
17	...	...	...	...	...	...	S 72 W	10.69	10.78	32.2	25.0	7.2	...	...	0.1	4.5	.010	4.5
18	27.25	.119	79	.505	.386	1.00	S 76 W	9.65	9.78	30.2	27.0	3.2	...	...	...	...	...	...
19	27.50	.138	90	.399	.261	0.87	S 19 E	7.56	9.32	32.6	19.2	13.4	...	...	2.0	5.0	.200	5.0
20	31.40	.145	81	.163	.018	0.83	S 85 W	12.89	13.34	36.0	27.5	8.5	...	...	0.5	4.2	.050	4.2
21	23.87	.089	70	.553	.464	0.52	N 60 W	20.06	20.17	29.2	22.5	6.7	...	...	*	0.5	*	0.5
22	21.02	.097	85	.716	.619	0.88	N 76 E	10.44	11.13	26.0	13.2	12.8	...	...	2.0	16.0	.200	16.0
23	29.60	.139	85	.176	.037	1.00	S 57 W	3.31	16.43	36.4	16.0	20.4	.430	7.1	*	0.5	.430	7.6
24	...	...	...	...	...	...	N 59 W	13.01	14.57	19.7	8.0	11.7	...	...	...	...	...	...
25	29.67	.128	76	.734	.606	0.83	S 45 W	12.31	12.58	39.2	8.1	31.1	...	...	...	...	...	...
26	33.40	.146	76	.761	.615	0.13	N 21 W	0.66	1.51	44.8	27.8	17.0	...	...	...	...	...	...
27	36.15	.166	78	.847	.680	0.45	N 77 W	3.76	5.12	43.5	25.4	18.1	...	...	...	...	...	...
28	37.32	.187	84	.655	.468	0.97	N 54 W	3.04	6.18	46.0	32.8	13.2	.040	2.5	...	...	.040	2.5
	26.06	0.130	84	29.544	29.414	0.83	N 77 W	3.86	10.58	32.37	18.54	13.83	0.815	21.1	29.7	93.6	3.785	114.7

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MARCH, 1861.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
								Miles.	Miles.									
1	39°.72	0.206	85	29.545	29.339	0.98	N 50° W	0.42	2.60	44°.2	34°.4	9°.8	0.007	2.0	...		0.007	2.0
2	37.42	.209	93	.339	.129	1.00	N 35 W	0.48	1.81	43.2	34.2	9.0	.080	2.0	...	...	.080	2.0
3	...	...	...	...	...	...	S 85 W	5.47	6.85	47.4	35.0	12.4	170	3.5	...	...	.170	3.5
4	29.35	.109	66	.403	.294	0.45	S 85 W	15.27	17.25	38.8	31.8	7.0	...	...	2.5	8.7	.250	8.7
5	19.55	.080	76	.652	.572	0.63	S 80 W	16.81	17.83	24.6	11.8	12.8	...	...	0.1	0.5	.010	0.5
6	17.47	.068	68	.582	.514	0.28	N 55 W	21.27	22.62	25.0	18.2	6.8	...	...	0.2	5.0	.020	5.0
7	8.20	.055	84	30.055	30.000	0.00	S 74 E	1.72	6.64	24.4	−3.5	27.9	...	...	...	...	...	...
8	33.12	.149	77	29.482	29.333	0.97	N 44 E	2.45	9.70	42.6	9.3	33.3	.050	2.5	0.2	3.0	.070	5.5
9	34.63	.162	81	.313	.151	0.58	N 87 W	8.45	9.69	39.8	32.2	7.6	...	...	0.1	0.3	.010	0.3
10	...	...	...	...	...	...	N 33 W	14.30	14.54	25.4	19.1	6.3	...	...	...	...	...	...
11	24.90	.116	81	.795	.679	0.50	S 55 W	13.36	14.23	33.6	9.3	24.3	...	...	*	0.5	*	0.5
12	27.40	.111	74	.639	.528	1.00	N 51 E	8.38	11.61	32.0	24.8	7.2	...	...	1.0	5.0	.100	5.0
13	21.35	.091	80	.779	.688	0.40	N 10 W	9.24	10.92	28.2	18.8	9.4	...	...	...	...	...	...
14	20.38	.088	79	.825	.738	0.42	N 45 E	2.96	5.18	26.0	17.0	9.0	...	...	0.2	1.5	.020	1.5
15	26.77	.119	81	.658	.539	0.27	S 11 W	3.37	3.88	33.8	14.8	19.0	...	...	...	...	...	...
16	28.12	.122	74	.319	.197	0.67	N 56 W	13.30	15.81	44.0	22.2	21.8	...	...	...	...	...	...
17	...	...	...	...	...	...	N 30 W	13.65	13.79	9.2	0.2	9.0	...	...	...	...	...	...
18	3.48	.041	77	30.109	30.068	0.35	N 38 E	6.26	6.70	9.8	−5.2	15.0	...	...	...	...	..	...
19	12.77	.059	75	29.955	29.896	0.22	N 49 E	4.87	5.23	19.4	3.5	15.9	...	...	...	...	...	...
20	22.20	.098	81	.662	.563	0.83	N 67 E	7.96	11.16	27.0	12.6	14.4	...	..	2.0	11.0	.200	11.0
21	25.32	.113	83	.609	.496	0.53	N 34 W	9.47	10.02	32.2	20.5	11.7	...	...	0.5	3.0	.050	3.0
22	30.37	.131	77	.722	.592	0.03	N 61 W	2.11	3.61	38.9	22.5	16.4	...	...	...	...	...	...
23	34.47	.178	88	.265	.087	1.00	S 55 W	9.03	13.17	40.4	25.0	15.4	.210	7.7	*	1.0	.210	8.7
24	...	...	...	...	...	..	N 76 W	14.07	15.55	31.5	23.4	8.1	...	...	0.1	4.0	.010	4.0
25	36.18	.183	85	.638	.455	1.00	N 81 E	4.22	5.65	39.9	25.8	14.1	.468	12.5	...	...	.468	12.5
26	38.97	.227	95	.294	.067	1.00	N 74 E	6.77	8.56	42.8	34.2	8.6	.865	13.5	...	...	.865	13.5
27	37.22	.190	84	.314	.124	0.88	S 82 W	17.29	18.71	45.0	35.8	9.2	...	...	*	0.2	*	0.2
28	32.02	.140	77	.844	.704	0.95	N 77 W	3.24	8.73	38.4	25.4	13.0	...	...	...	...	...	...
29	...	...	...	...	...	...	N 47 E	5.62	11.12	43.8	32.4	11.4	.275	11.5	...	...	.275	11.5
30	31.63	.138	78	.720	.581	0.53	N 41 W	13.36	13.87	35.0	31.5	3.5	...	...	0.2	0.8	.020	0.8
31	...	...	...	...	...	...	S 89 E	10.29	10.45	33.2	25.0	8.2	...	...	...	...	...	...
	26°.92	0.127	80	29.621	29.493	0.62	N 54° W	4.33	10.56	33°.53	20°.71	12°.82	2.125	55.2	7.1	44.5	2.835	99.7

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—APRIL, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	32°.28	0.162	89	29.611	29.449	1 00	S 89° E	12.22	16.38	33°.6	28°.3	5°.3	*	0.5	6.0	14.5	.600	15.0
2	32.85	.150	81	.757	.607	0.70	N 63 W	3.20	3.75	36.4	27.0	9.4	...	...	...	...	...	...
3	32.05	.148	81	.948	.800	0.50	N 70 E	0 67	1.28	39 0	23.8	15.2	...	...	...	...	..	...
4	34.28	.156	79	30.041	.885	0.15	N 84 E	1.83	2 24	38.8	29.1	9 7	...	...	...	...	...	...
5	37.80	.126	56	29.947	.821	0 45	N 57 E	2 27	3.23	45.0	28 9	16.1	...	...	...	...	...	...
6	41.47	.151	58	.884	.733	0.45	N 80 E	12.95	12.98	46.8	34.8	12.0	...	...	...	...	...	...
7	...	...	...	...	...	...	N 83 E	13.02	13.20	43 5	36.0	7.5	...	...	...	...	...	...
8	40.30	.191	75	.669	.478	0.72	N 85 E	16 04	16 06	45.0	34.8	10.2	.015	1.0	...	...	.015	1.0
9	43.67	.183	56	.640	.457	0 53	N 79 E	14 63	14 70	50.2	36.4	13.8	.015	0.5	...	...	.015	0.5
10	44.13	.147	53	.739	.592	0 00	N 67 E	2.31	4.47	53 8	36 8	17.0	...	...	...	...	...	...
11	47.88	.201	59	.633	.432	0.23	N 87 E	7.52	7.78	56.8	35.2	21.6	.072	4.5	...	...	.072	4.5
12	47.83	.287	87	.436	.149	1.00	S 78 E	4 30	4.60	58.0	41.0	17.0	.515	6 5	...	...	.515	6.5
13	48.62	.301	88	.215	28.914	0.78	S 77 W	3.09	5.78	60.8	42 5	18.3	*	0.5	...	...	*	0.5
14	...	...	...	...	...	...	N 76 W	13.56	13.79	43.5	41.0	2.5	...	...	...	...	...	...
15	35.95	.170	80	.631	29.461	0.95	N 42 E	1.38	2.88	39.0	34 2	4.8	...	...	*	*	*	*
16	38.50	.146	62	.492	.346	1.00	N 32 E	12 54	13 57	43 9	32.0	11.9	...	...	...	...	...	...
17	36 03	.125	60	.260	.135	0.32	N 38 E	15.99	16.76	44 5	32.2	12 3	...	...	...	...	...	...
18	32.45	.158	86	.218	.060	1.00	N 21 E	4.54	5.40	35.2	27.6	7.6	...	...	0.7	7.0	.070	7.0
19	36.27	.160	74	.505	.345	0.18	N 34 W	12.12	12.33	48.0	29 6	18.4	...	...	...	...	...	...
20	41.30	.191	72	.587	.396	0.52	S 52 W	6.63	7.40	50.0	27.0	23.0	...	...	...	...	...	...
21	...	...	...	...	...	...	East	5 96	7.68	55.2	33.8	21.4	.025	1.0	...	...	.025	1.0
22	54.77	.307	70	.339	.032	0.75	S 79 W	2.32	8.63	67 0	41 3	25.2	.005	0.4	...	...	.005	0.4
23	49.02	.304	87	.490	.186	0.87	N 68 E	2.10	4.32	51.8	47.2	4 6	.037	1.2	...	...	.037	1.2
24	50.02	.245	71	.328	.083	0.58	S 63 W	11.99	13.10	62 3	41 8	20.5	.005	0.2	...	...	.005	0.2
25	43.98	.176	61	.579	.403	0.42	N 69 W	10.19	10.83	52.2	40.0	12.2	...	...	...	...	...	...
26	43.27	.194	69	.644	.450	0.52	S 89 E	9.19	9.50	49.4	32.0	17.4	...	...	...	...	...	...
27	48.67	.286	82	.217	28.931	0.85	N 82 E	6.12	9.21	58.3	40.2	18.1	.615	6.2	...	...	.615	6.2
28	...	...	...	...	...	...	N 52 W	10.13	11.62	59.2	43.2	16.0	...	...	...	...	...	...
29	51.03	.266	70	.418	29.152	0.57	S 40 W	3.41	5.56	66.2	37.4	28 8	...	...	...	...	...	...
30	48.12	.236	70	.434	.198	0.88	N 39 W	5.28	8.08	58.0	45.0	13.0	.315	6.8	0.2	0.5	.335	7.3
	42°.02	0.199	73	29.564	29.365	0.61	N 37° E	2.31	8.90	49°.71	35°.35	14°.36	1.619	29.3	6.9	22.0	2.309	51.3

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MAY, 1861.

DAYS.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded S y.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
1	34°.93	0.143	70	29.668	29.525	0.37	N 37° W	21.32	21.62	41°.0	32°.5	8°.5	...	...	0.5	1.0	0.050	1.0
2	36.03	.146	69	.817	.671	0.37	N 43 W	5.20	7.23	45.4	28.0	17.4	...	...	...	...	...	...
3	37.72	.125	56	.661	.536	0.42	N 70 E	5.27	6.32	44.5	32.0	12.5	...	...	...	...	...	...
4	42.57	.136	51	.652	.516	0.00	S 37 W	1.44	4.44	49.8	32.0	17.8	...	...	...	...	...	...
5	...	...	...	...	...	...	N 89 E	11.33	11.46	54.8	31.8	23.0	0.260	2.2	...	...	.260	2.2
6	47.75	.294	89	28.973	28.679	1.00	N 22 E	4.04	15.96	53.2	43.0	10.2	1.845	10.3	...	...	1.845	10.3
7	49.52	.265	75	28.872	28.607	0.98	S 76 W	14.99	15.53	55.5	45.4	10.1	.100	5.5	...	...	.100	5.5
8	44.17	.206	72	29.322	29.116	0.63	N 40 W	8.74	9.06	50.5	40.4	10.1	*	1.0	...	...	*	1.0
9	44.93	.224	74	.585	.361	0.12	S 26 E	2.08	2.59	54.0	32.8	21.2	...	...	...	...	...	...
10	45.05	.231	76	.369	.138	0.87	N 69 E	6.71	7.17	49.6	37.8	11.8	.165	6.2	...	...	.165	6.2
11	48.58	.270	79	.416	.146	0.58	S 43 W	0.69	2.92	57.4	43.5	13.9	...	...	...	...	...	...
12	...	...	...	...	...	...	S 61 E	1.70	3.07	60.2	42.8	17.4	...	...	...	...	...	...
13	47.82	.296	89	.391	.095	1.00	N 82 E	7.07	7.51	50.2	45.2	5.0	.020	6.0	...	...	.020	6.0
14	50.45	.259	71	.407	.148	0.70	S 79 W	11.09	11.27	54.8	44.4	10.4	...	...	...	...	...	...
15	48.90	.246	73	.457	.211	0.37	S 62 W	3.72	7.16	60.2	37.8	22.4	.170	3.0	...	...	.170	3.0
16	44.33	.210	73	.548	.338	0.88	N 75 W	15.00	15.15	50.4	41.0	9.4	...	...	...	...	...	...
17	42.28	.162	60	.775	.613	0.28	N 37 W	14.25	14.65	50.0	36.2	13.8	...	...	...	...	...	...
18	44.13	.208	71	.872	.664	0.78	N 86 W	1.22	6.41	53.0	32.6	20.4	...	...	...	...	...	...
19	...	...	...	...	...	...	N 52 E	7.24	7.54	48.4	40.0	8.4	*	0.9	...	...	*	0.9
20	50.53	.252	69	.578	.326	0.55	N 51 E	3.64	7.91	57.8	44.6	13.2	...	...	...	...	...	...
21	52.70	.188	48	.694	.506	0.07	N 22 W	11.65	11.83	61.0	45.2	15.8	...	...	...	...	...	...
22	52.45	.236	59	.310	.575	0.00	S 54 W	1.14	2.47	60.9	41.3	19.6	...	...	...	...	...	...
23	50.90	.249	67	.779	.530	0.60	S 77 E	4.10	4.44	59.8	37.8	22.0	...	...	...	...	...	...
24	56.82	.318	68	.497	.179	0.88	S 47 W	6.40	8.98	68.0	45.0	23.0	.625	3.2	...	...	.625	3.2
25	62.25	.419	74	.389	28.971	0.20	N 60 W	10.78	11.08	73.0	53.5	19.5	...	...	...	...	...	...
26	...	...	...	...	...	...	N 87 E	1.79	7.10	65.2	51.0	14.2	.115	4.0	...	...	.115	4.0
27	47.33	.251	76	.086	28.835	0.78	N 61 W	27.39	27.96	55.8	47.9	7.9	*	0.9	...	...	*	0.9
28	48.00	.197	60	.553	29.356	0.60	N 45 W	10.28	11.50	60.5	40.4	20.1	.080	4.7	...	...	.080	4.7
29	45.32	.215	69	.777	.562	0.23	N 47 W	4.81	6.07	55.0	42.2	12.8	...	...	...	...	...	...
30	51.62	.233	60	.910	.677	0.00	S 33 W	4.22	4.64	61.4	33.0	28.4	...	...	...	...	...	...
31	54.80	.286	67	.868	.583	0.00	S 73 E	2.52	3.12	65.2	40.2	25.0	...	...	...	...	...	...
	47°.50	0.232	69	29.545	29.313	0.49	N 47° W	3.60	9.17	55°.69	40°.04	15°.65	3.380	47.9	0.5	1.0	3.430	48.9

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JUNE, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	57°.82	0.273	60	29.767	29.494	0.50	S 45° E	0.60	1.35	69°.8	42°.2	27°.6	...	...	...	...	...	...
2	...	...	...	...	...	...	S 56 E	3.03	5.15	64.4	48.0	16.4	0.541	9.0	...	...	0.541	9.0
3	66.93	.497	76	.391	28.894	0.60	N 65 W	10.68	15.04	74.8	53.0	21.8	...	...	...	...	...	...
4	52.20	.278	71	.652	29.374	0.73	N 88 E	6.77	7.72	56.2	53.0	3.2	...	...	...	...	...	...
5	51.10	.260	69	.676	.417	1.00	N 75 E	11.63	11.66	54.6	47.0	7.6	.598	4.0	...	...	.598	4.0
6	54.47	.348	81	.699	.351	0.92	N 80 E	3.22	4.11	62.0	48.2	13.8	...	...	...	...	...	...
7	58.68	.403	82	.695	.292	0.75	N 52 E	0.73	3.94	66.8	51.5	15.3	*	0.1	...	...	*	0.1
8	67.60	.437	64	.711	.274	0.18	N 16 W	4.08	5.19	75.6	52.8	22.8	...	...	...	...	...	...
9	...	...	...	...	...	...	N 20 W	9.74	10.08	87.8	63.4	24.4	...	...	...	...	...	...
10	72.22	.516	65	.601	.085	0.00	N 35 W	8.72	4.42	85.0	55.5	29.5	...	...	...	...	...	...
11	72.40	.549	69	.432	28.883	0.28	N 76 W	3.68	4.94	84.0	57.8	26.2	.006	1.0	...	...	.006	1.0
12	65.00	.375	61	.485	29.110	0.17	N 49 W	15.05	15.31	73.2	62.5	10.7	...	...	...	...	...	...
13	57.90	.286	61	.720	.434	0.07	N 35 W	4.75	5.62	66.2	51.2	15.0	...	...	...	...	...	...
14	55.28	.315	72	.578	.262	0.68	N 83 E	2.10	2.46	61.2	41.6	19.6	.140	2.5	...	...	.140	2.5
15	65.42	.520	83	.228	28.708	0.78	S 71 W	5.98	8.10	73.8	51.0	22.8	.191	3.5	...	...	.191	3.5
16	...	...	...	...	...	...	N 14 W	14.11	14.33	65.0	56.5	8.5	...	...	...	...	...	...
17	54.08	.253	60	.700	29.447	0.12	S 13 E	0.26	2.94	60.8	44.2	16.6	...	...	...	...	...	...
18	54.60	.308	71	.549	.241	0.57	S 30 W	1.58	1.63	63.0	41.8	21.2	*	0.2	...	...	*	0.2
19	61.98	.452	80	.472	.020	0.52	N 55 W	2.73	4.85	71.4	48.5	22.9	.299	2.3	...	...	.299	2.3
20	60.33	.389	74	.578	.189	0.47	S 86 E	1.78	5.42	66.8	54.5	12.3	.312	2.5	...	...	.312	2.5
21	59.12	.406	81	.368	28.962	0.57	N 70 W	3.87	5.68	69.8	51.2	18.6	...	...	...	...	...	...
22	66.75	.371	60	.436	29.065	0.20	N 76 W	6.12	6.62	79.0	50.2	28.8	...	...	...	...	...	...
23	...	...	...	...	...	...	N 33 W	8.02	8.87	71.4	53.8	17.6	.038	1.5	...	...	.038	1.5
24	59.68	.321	63	.634	.313	0.13	S 76 W	3.26	3.33	68.4	46.4	22.0	...	...	...	...	...	...
25	64.35	.428	71	.571	.143	0.53	S 55 E	1.56	2.16	71.5	51.6	19.9	...	...	...	...	...	...
26	68.97	.398	58	.470	.072	0.38	N 68 W	8.38	9.24	79.0	59.5	19.5	*	0.1	...	...	*	0.1
27	62.30	.399	71	.654	.255	0.37	S 39 W	3.20	4.01	72.4	50.0	22.4	...	...	...	...	...	...
28	61.52	.344	62	.606	.262	0.50	N 86 W	1.14	2.56	73.5	54.6	18.9	*	0.1	...	...	*	0.1
29	61.58	.311	57	.574	.263	0.15	S 18 W	3.40	4.32	71.5	47.2	24.3	...	...	...	...	...	...
30	...	...	...	...	...	...	N 13 W	1.12	2.23	72.0	49.0	23.0	.204	5.5	...	...	.204	5.5
	61°.29	0.377	69	29.570	29.192	0.45	N 39° W	2.29	6.11	70°.36	51°.26	19°.11	2.329	32.3	...	...	2.329	32.3

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JULY, 1861.

	DAILY MEANS						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
								Miles	Miles.									
1	59°.23	0.337	67	29.562	29.225	0.73	N 21° W	6.17	6.33	64°.6	53°.5	11°.1	...	...	...	...	...	...
2	54.47	.277	66	.657	.380	0.62	N 44 W	9.16	9.25	67.2	47.0	20.2	...	...	...	...	...	...
3	66.90	.378	58	.690	.312	0.25	N 87 W	1.99	3.40	78.5	49.4	29.1	...	...	...	...	...	...
4	67.53	.480	70	.682	.202	0.08	S 1 E	2.08	2.37	80.0	51.2	28.8	...	...	...	...	...	...
5	69.77	.477	65	.589	.112	0.05	South	3.00	3.32	81.4	55.0	26.4	...	...	...	...	...	...
6	69.93	.500	69	.564	.064	0.52	S 9 W	1.89	1.90	80.8	59.6	21.2	...	...	...	...	...	...
7	...	...	...	...	...	..	S 18 W	2.11	2.17	84.5	61.4	23.1	*	0.2	...	...	*	0.2
8	73.85	.658	79	.427	28.769	0.57	S 24 W	4.76	4.91	84.2	65.8	18.4	.035	0.5	...	...	.035	0.5
9	[illegible]	.596	75	.319	28.722	[illegible]	N 81 W	4.86	5.29	83.0	65.0	18.0	*	0.1	...	...	*	0.1
10	[illegible]	.458	77	.371	28.913	[illegible]	N 12 E	5.91	8.30	75.2	55.8	19.4	.875	11.2	...	...	.875	11.2
11	[illegible]	.336	77	.421	29.085	0.72	N 39 W	8.01	8.35	61.2	53.2	8.0	.013	2.0	...	...	.013	2.0
12	57.98	.352	73	.589	.237	0.53	N 42 W	8.87	9.67	64.8	47.2	17.6	...	...	...	...	...	...
13	59.92	.390	76	.779	.389	0.72	N 19 W	0.45	1.94	69.6	54.0	15.6	...	...	...	...	...	...
14	...	...	...	...	...	...	S 16 E	0.69	1.35	71.4	50.8	20.6	...	...	...	...	...	...
15	59.75	.441	86	.545	.104	1.00	N 38 W	0.63	0.96	65.2	51.6	13.6	.135	4.5	...	...	.135	4.5
16	64.30	[illegible]	71	.456	.017	0.48	N 69 W	2.35	3.35	74.0	57.2	16.8	.245	1.5	...	...	.245	1.5
17	[illegible]	.409	73	.563	.154	0.38	S 21 E	1.95	2.14	72.4	47.0	25.4	...	...	...	...	...	...
18	67.28	.522	78	.506	[illegible]	0.73	S 28 W	3.90	4.58	77.2	55.2	22.0	.007	0.2	...	...	.007	0.2
19	66.63	.521	80	.369	28.848	0.75	N 19 W	1.58	3.60	76.0	60.4	15.6	.400	5.5	...	...	.400	5.5
20	63.38	.429	72	.411	28.981	0.17	N 44 W	10.01	10.08	72.0	57.5	14.5	...	...	...	...	...	...
21	...	...	...	...	...	...	N 40 W	3.65	4.50	69.8	52.0	17.8	.010	0.5	...	...	.010	0.5
22	60.77	.389	73	.627	29.238	0.23	N 36 W	2.72	4.87	68.5	51.8	16.7	*	0.2	...	...	*	0.2
23	65.87	.354	57	.675	.321	0.52	N 1 E	4.03	4.79	75.8	54.0	21.8	...	...	...	...	...	...
24	66.12	.511	80	.729	.218	0.20	[illegible] 31 E	1.65	1.88	73.2	55.5	17.7	...	...	...	...	...	...
25	67.83	.453	67	.696	.243	0.78	S 7 E	3.92	4.15	77.0	52.4	24.6	...	...	...	...	...	...
26	70.30	.577	78	.557	28.980	1.00	S 17 W	3.66	4.12	78.0	63.4	14.6	.085	2.5	...	...	.085	2.5
27	68.68	.558	80	.563	29.005	0.90	N 83 E	4.39	4.57	79.0	65.0	14.0	...	...	...	...	...	...
28	...	...	...	...	...	...	S 13 E	7.19	9.35	74.7	64.5	10.2	.590	3.5	...	...	.590	3.5
29	66.57	.537	82	.450	28.913	0.83	S 56 W	5.30	5.75	73.4	61.8	11.6	*	0.3	...	...	*	0.3
30	71.20	.558	73	.558	29.000	0.22	S 15 W	3.30	3.82	80.8	58.2	22.6	.230	1.5	...	...	.230	1.5
31	73.02	.663	82	.506	28.843	0.65	N 26 W	1.85	3.51	81.4	66.8	14.6	.010	0.5	...	...	.010	0.5
	65°.37	0.467	73	29.551	29.084	0.56	N 74° W	1.43	4.66	74°.67	56°.23	18°.44	2.635	34.7	...	...	2.635	34.7

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—AUGUST, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	71°.63	0.641	83	29.552	28.911	0.22	S 55° E	1.41	2.23	78°.2	66°.4	11°.8	...	...	...	...	...	...
2	72.05	.649	82	.474	28.825	0.40	N 72 E	1.70	4.37	81.8	62.4	19.4	...	...	...	...	...	...
3	74.20	.650	78	.603	28.953	0.08	N 84 E	3.92	6.07	80.0	67.4	12.6	...	...	...	...	...	...
4	...	...	...	...	...	...	S 37 W	3.58	5.80	85.2	66.2	19.0	0.005	1.5	...	...	0.005	1.5
5	73.17	.646	78	.484	28.838	0.35	N 84 W	0.87	3.26	82.0	67.0	15.0	...	...	...	...	...	...
6	68.92	.560	78	.562	29.002	0.60	S 80 E	1.25	1.84	76.8	61.8	15.0	.013	0.3	...	...	.013	0.3
7	62.65	.516	90	.623	.107	1.00	N 56 E	4.78	4.95	66.2	61.6	4.6	.465	10.7	...	...	.465	10.7
8	65.18	.476	77	.612	.135	1.00	N 74 E	4.28	4.47	69.5	61.0	8.5	.115	0.5	...	...	.115	0.5
9	66.57	.580	89	.488	28.908	0.83	N 68 E	1.91	3.29	71.8	64.0	7.8	.015	4.0	...	...	.015	4.0
10	69.15	.525	72	.434	28.909	0.68	N 29 W	2.84	6.87	83.4	59.2	24.2	...	...	...	...	...	...
11	...	...	...	...	...	...	N 88 E	1.59	2.58	68.8	54.4	14.4	...	...	...	...	...	...
12	57.92	.398	84	.590	29.192	1.00	N 43 E	9.92	10.01	62.4	57.8	4.6	.760	12.8	...	...	.760	12.8
13	60.77	.425	80	.689	.264	0.65	N 54 E	4.05	5.09	69.0	55.0	14.0	...	...	...	...	...	...
14	59.40	.366	72	.854	.489	0.50	S 7 W	0.91	1.39	70.6	53.4	17.2	...	...	...	...	...	...
15	61.35	.391	72	.842	.451	0.03	S 25 E	0.68	1.02	72.0	47.0	25.0	...	...	...	...	...	...
16	64.70	.450	74	.727	.277	0.60	S 6 E	2.93	3.21	74.2	53.4	20.8	...	...	...	...	...	...
17	66.18	.507	78	.721	.214	0.58	S 85 W	0.36	1.88	77.0	54.0	23.0	*	0.5	...	...	*	0.5
18	...	...	...	...	...	...	S 80 W	0.12	2.58	75.3	53.0	22.3	*	0.5	...	...	*	0.5
19	64.13	.469	78	.790	.321	0.62	N 78 E	2.17	2.60	70.6	57.2	13.4	...	...	...	...	...	...
20	64.23	.424	71	.855	.431	0.67	S 89 E	3.19	3.24	70.2	58.4	11.8	...	...	...	...	...	...
21	70.48	.621	83	.620	28.999	0.97	S 49 W	3.86	7.08	80.0	58.5	21.5	.575	4.0	...	...	.575	4.0
22	61.70	.451	81	.571	29.120	0.42	N 44 W	9.73	9.92	70.8	60.5	10.3	*	0.3	...	...	*	0.3
23	63.15	.371	66	.741	.370	0.12	N 75 W	4.45	5.21	75.4	51.2	24.2	...	...	...	...	...	...
24	65.18	.455	74	.788	.333	0.22	S 41 W	0.88	1.85	75.5	52.4	23.1	...	...	...	...	...	...
25	...	...	...	...	...	...	S 50 E	1.10	1.60	75.5	54.5	21.0	.115	1.5	...	...	.115	1.5
26	67.92	.560	82	.699	.138	0.93	S 21 W	1.82	1.98	76.6	62.0	14.6	.605	2.2	...	...	.605	2.2
27	68.03	.557	81	.631	.074	0.68	S 29 W	6.32	7.00	75.8	63.8	12.0	.085	3.5	...	...	.085	3.5
28	66.07	.545	85	.631	.086	0.55	S 23 W	1.87	2.33	74.8	58.4	16.4	.165	0.8	...	...	.165	0.8
29	63.27	.473	81	.607	.134	0.43	N 75 W	1.20	2.38	74.2	59.8	14.4	.035	0.2	...	...	.035	0.2
30	60.45	.354	67	.659	.305	0.15	N 49 W	10.71	10.92	70.0	51.0	19.0	...	...	...	...	...	...
31	59.40	.315	63	.784	.469	0.38	N 31 W	1.85	3.54	69.8	49.8	20.0	...	...	...	...	...	...
	65°.48	0.495	78	29.653	29.158	0.54	N 8° E	0.46	4.21	74°.30	58°.15	16°.16	2.953	43.3	...	...	2.953	43.3

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—SEPTEMBER, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles.									
1	...	...	...	...	...	...	S 88° E	4.45	4.70	69°.2	52°.2	17°.0	*	0.2	...	...	*	0.2
2	69.83	0.588	81	29.566	28.978	0.78	S 41 W	6.98	8.38	78.0	61.2	16.8	.002	0.2	...	...	.002	0.2
3	66.77	.472	70	.611	29.139	0.25	N 64 W	8.08	10.21	78.8	61.5	17.3	.070	0.2	...	...	.070	0.2
4	58.55	.346	71	.894	.458	0.47	N 30 W	4.21	4.47	65.8	52.2	13.6	...	...	...	...	...	...
5	61.28	.415	77	.588	.173	0.57	S 18 E	2.76	3.02	69.2	50.2	19.0	...	...	...	...	...	...
6	63.87	.410	69	.418	.008	0.28	N 87 W	6.56	7.20	75.0	56.0	19.0	...	...	...	...	...	...
7	55.47	.327	75	.788	.461	0.67	N 20 W	2.30	2.88	64.4	50.0	14.4	*	0.1	...	...	*	0.1
8	...	...	...	...	...	...	S 66 E	2.01	2.58	64.8	47.2	17.6	*	0.1	...	...	*	0.1
9	57.63	.366	77	.948	.583	0.80	N 17 E	0.90	1.38	64.4	54.8	9.6	*	1.0	...	...	*	1.0
10	59.58	.417	81	.782	.365	0.97	N 80 E	3.98	4.17	64.0	53.2	10.8	.345	9.7	...	...	.345	9.7
11	61.17	.491	90	.407	28.916	0.77	N 9 W	2.47	3.55	63.4	58.0	5.4	.030	1.0	...	...	.030	1.0
12	60.73	.382	74	.560	29.179	0.47	N 66 W	2.93	3.12	70.4	56.8	13.6	...	...	...	...	...	...
13	63.33	.444	75	.683	.239	0.40	S 18 W	2.74	2.77	73.0	49.0	24.0	...	...	...	...	...	...
14	65.07	.561	90	.608	.047	0.70	S 41 W	1.23	2.05	68.0	58.5	9.5	.115	5.5	...	...	.115	5.5
15	...	...	...	...	...	...	N 27 W	2.55	2.92	75.0	58.2	16.8	...	...	...	...	...	...
16	56.33	.332	73	.747	.415	0.82	N 78 E	1.87	2.39	63.0	50.0	13.0	...	...	...	...	...	...
17	55.93	.328	74	.571	.244	0.62	N 15 E	3.49	4.29	63.0	53.6	9.4	*	0.5	...	...	*	0.5
18	60.43	.421	81	.567	.146	0.00	S 19 W	4.19	5.85	68.0	49.5	18.5	...	...	...	...	...	...
19	66.93	.459	69	.486	.027	0.82	S 62 W	4.20	7.23	74.8	53.0	21.8	*	*	...	...	*	*
20	57.73	.421	88	.467	.046	1.00	N 44 E	7.32	8.29	61.2	56.0	5.2	.895	12.0	...	...	.895	12.0
21	52.03	.327	84	.529	.201	0.83	N 4 W	8.20	8.44	55.2	50.6	4.6	.043	5.0	...	...	.043	5.0
22	...	...	...	...	...	...	S 57 W	4.89	6.74	62.2	39.0	23.2	...	...	...	...	...	...
23	56.03	.361	79	.568	.207	0.10	N 67 W	8.01	8.24	68.8	47.2	21.6	...	...	...	...	...	...
24	55.00	.324	76	.725	.401	0.15	S 1 W	1.25	1.94	64.8	45.5	19.3	...	...	...	...	...	...
25	61.15	.433	81	.603	.170	0.38	S 25 E	1.99	2.17	69.8	47.8	22.0	...	...	...	...	...	...
26	62.72	.473	82	.378	28.905	0.82	S 36 W	3.88	5.13	72.0	59.8	12.2	.175	3.5	...	...	.175	3.5
27	52.53	.348	88	.231	28.883	1.00	N 44 W	5.07	7.06	59.2	53.0	6.2	1.855	11.0	...	...	1.855	11.0
28	47.58	.263	80	.488	29.225	0.60	S 85 W	7.48	7.75	56.5	46.4	10.1	.020	0.6	...	...	.020	0.6
29	...	...	...	...	...	...	S 82 W	2.76	3.29	54.5	37.1	17.4	.057	9.5	...	...	.057	9.5
30	48.95	.281	81	30.085	.802	0.85	N 46 E	1.18	2.03	55.0	46.4	8.6	...	...	...	...	...	...
	59°.07	0.400	79	29.608	29.209	0.60	N 71° W	1.39	4.81	66°.38	51°.80	14°.58	3.607	60.1	...	...	3.607	60.1

* Inappreciable

GENERAL METEOROLOGICAL ABSTRACT.—OCTOBER, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	53°.25	0.341	84	29.887	29.546	0.85	N 80° E	2 53	2 65	58°.2	44°.0	14°.2	...	...	...	...	...	...
2	59.12	.442	88	.540	.098	0.65	S 42 W	8.73	9.61	71.0	50.0	21.0	...	...	...	...	...	...
3	56.07	.303	70	.702	.398	0.52	N 52 W	5.23	7.16	65.2	54.0	11.2	0.018	1.5	...	...	.018	1.5
4	51 52	.359	94	.626	.267	1.00	N 64 E	8.63	9.10	53.0	47.9	5.1	.625	15.0	...	...	.625	15.0
5	55.25	.419	96	.434	.015	1.00	N 40 E	2 49	3.60	59.4	47.0	12.4	.012	0.5	...	...	.012	0.5
6	...	...	...	...	...	...	N 23 W	5.94	7.32	55.5	51.1	4.4	.415	7.5	...	...	.415	7.5
7	47.40	.284	86	.755	.471	0.92	N 21 E	1.66	3.48	53.5	38.8	14.7	...	...	...	...	...	...
8	50.28	.301	82	.861	.560	0.02	S 86 E	1.57	4.37	58.0	43.5	14.5	...	...	...	...	...	...
9	52.22	.291	75	.927	.636	0.17	N 69 E	4.32	5.06	59.0	44.5	14.5	...	...	...	...	...	...
10	52.33	.327	84	.778	.451	0.37	E	2.15	3.76	60.6	44.2	16.4	...	...	...	...	...	...
11	52 75	.360	90	.453	093	0.93	S 72 W	2.02	2.99	63.8	47.4	16.4	.058	2.5	...	...	.058	2.5
12	45.28	.235	77	.171	28.937	0.92	S 59 W	8.31	9.50	50 8	38.5	12.3	.005	1.0	...	...	.005	1.0
13	...	...	...	...	...	...	N 61 W	10.86	11.35	54.0	35.5	18.5	.005	0.3	...	...	.005	0.3
14	50.12	.273	75	.555	29.282	0.00	S 71 W	5.74	6.73	67.4	35.5	31.9	...	...	...	...	...	...
15	46.23	.229	74	.757	.528	0.57	N 69 E	2.54	4.02	55.2	35.0	20.2	...	...	...	...	...	...
16	52.73	.362	90	.638	.276	1.00	S 84 E	2.23	2.49	57.3	45.5	11.8	...	...	...	...	...	...
17	56.83	.381	83	.571	.190	0.88	N 50 E	2.97	4.07	62 0	50.0	12.0	.080	2.1	...	...	.080	2.1
18	56 83	.407	88	.460	.053	1.00	N 63 E	3.49	4.29	62.0	55.0	7.0	030	4.6	...	...	.030	4.6
19	51.63	.320	82	.420	.100	0.93	N 79 W	6 04	8.02	57.2	52.0	5.2	.072	5.0	...	...	.072	5.0
20	...	...	...	...	...	...	N 55 W	6.39	7.07	52.4	40.5	11.9	...	...	...	...	...	...
21	44.40	.222	75	.847	.625	0.12	E	8.97	9.43	52.0	33.5	18.5	...	...	...	...	...	...
22	51.03	.330	87	.476	.146	0.73	S 8 W	2.80	6.47	57.2	38.8	18.4	.455	5.9	...	...	.455	5.9
23	40.75	.198	77	.417	.219	0.58	N 80 W	9.63	10.20	47.4	43.8	3.6	.043	1.0	...	...	.043	1.0
24	34.27	.155	78	.899	.744	0.32	N 55 W	5.90	6.58	42.0	30.5	11.5	...	...	*	1.0	*	1.0
25	45.77	.241	78	.926	.685	0.58	S 17 W	6.04	6.32	51.8	29.0	22.8	...	...	...	...	...	...
26	44.22	.247	83	.836	.589	0.58	N 72 W	4.76	6.50	53.2	43.8	9.4	*	1.0	...	...	*	1.0
27	...	...	...	...	...	...	N 34 E	1.56	4.88	46.2	31.4	14.8	...	...	...	...	...	...
28	38.52	.176	74	.790	.614	0.02	S 75 E	2.20	3.71	47.0	31.0	16.0	...	...	...	...	...	...
29	42 82	.227	81	.289	.062	0.20	S 83 E	3.64	5.17	48.8	32.0	16.8	.105	4.0	...	...	.105	4.0
30	40.83	.229	89	.091	28.862	0.63	S 44 W	4 30	4.67	45 5	41.0	4.5	.070	1.7	...	...	.070	1.7
31	43.48	.236	84	.608	29.372	0.87	N 55 W	3.52	4.08	49.0	35.4	13.6	...	...	...	...	...	...
	48°.74	0.292	82	29.619	29.327	0.61	N 61° W	1.06	5.96	55°.34	41°.62	13°.73	1.993	53.6	*	1.0	1.993	54.6

* Inappreciable.

	48 74	0.292	82	29.619	29.327	0.61	N 61 W	1.06	5.96	55.34	41.62	13.73	1.993	53.6	*	1.0	1.993	54.6

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—NOVEMBER, 1861.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	42°.45	0.222	81	29.877	29.655	1.00	N 70° E	10.77	10.94	44°.2	39°.0	5°.2	0.415	5.5	...	...	0.415	5.5
2	40.33	.235	94	.325	.090	1.00	N 51 E	18.30	20.73	44.0	38.5	5.5	3.132	19.0	...	...	3.132	19.0
3	...	...	...	...	...	...	S 79 W	7.83	8.25	44.5	37.0	7.5	.195	6.0	...	...	.195	6.0
4	40.05	.206	83	.302	.096	0.95	S 75 W	6.50	6.85	46.5	36.0	10.5	.005	0.2	*	0.2	.005	0.4
5	46.07	.256	82	.228	28.973	0.78	S 43 W	2.46	3.83	52.4	38.6	13.8	...	...	...	...	...	...
6	43.80	.219	77	.305	29.086	0.53	N 36 W	6.23	6.85	51.6	41.0	10.6	*	0.5	...	...	*	0.5
7	38.25	.164	73	.543	.379	0.38	N 39 W	2.89	3.13	46.0	33.6	12.4	...	...	...	...	...	...
8	40.65	.209	82	.431	.222	1.00	N 57 W	0.66	1.42	45.2	31.4	13.8	*	0.4	...	...	*	0.4
9	35.92	.152	73	.570	.418	0.32	N 22 W	2.26	2.42	44.0	31.0	13.0	...	...	...	...	...	...
10	...	...	...	...	...	...	S 51 E	7.73	9.14	48.8	28.4	20.4	.090	2.0	...	...	.090	2.0
11	42.82	.210	75	.540	.331	0.47	N 80 W	15.20	15.40	49.6	43.0	6.6	.020	1.0	...	...	.020	1.0
12	37.83	.179	79	.911	.732	0.72	S 45 E	1.37	3.59	46.2	29.5	16.7	.025	0.5	...	...	.025	0.5
13	41.73	.201	75	.648	.447	0.88	N 37 W	1.11	3.44	45.0	34.0	11.0	...	...	...	...	...	...
14	37.38	.158	69	.610	.452	0.95	N 24 W	5.34	6.43	45.0	36.0	9.0	...	...	...	...	...	...
15	31.70	.118	66	.473	.355	0.82	N 36 W	11.14	11.82	35.8	29.2	6.6	...	...	0.1	1.6	.010	1.6
16	32.37	.143	78	.587	.444	0.82	N 37 W	18.92	19.10	35.0	27.6	7.4	...	...	0.1	3.0	.010	3.0
17	...	...	...	...	...	...	N 43 W	9.73	9.98	40.2	28.0	12.2	...	...	...	...	...	...
18	33.25	.144	75	.761	.617	0.02	N 17 W	9.11	9.38	41.0	23.0	18.0	...	...	...	...	...	...
19	33.47	.138	71	.890	.752	0.12	S 79 E	4.12	4.89	39.4	25.6	13.8	...	...	...	...	...	...
20	38.70	.182	77	.619	.437	0.98	S 82 E	5.18	5.30	42.2	30.0	12.2	.127	4.8	...	...	.127	4.8
21	38.50	.219	93	.805	.587	1.00	S 77 E	0.45	0.60	43.8	37.0	6.8	*	1.5	...	...	*	1.5
22	39 87	.204	83	.453	.249	1.00	S 72 E	9.85	14.42	44.0	34.4	9.6	.230	3.2	...	...	.230	3.2
23	35.20	.167	81	.158	28.991	1.00	S 39 W	6.57	7.35	37.4	33.5	3.9	...	...	0.3	3.1	.030	3.1
24	...	...	...	...	...	...	S 58 W	1.47	1.54	34.0	30.0	4.0	...	...	*	0.5	*	0.5
25	30.67	.148	86	.344	29.196	0.55	N 16 W	0.47	0.48	37.0	23.3	13.7	...	...	...	...	...	...
26	32.18	.143	79	.685	.541	0.20	S 47 W	1.84	3.31	40.8	25.0	15.8	...	...	...	...	...	...
27	35.02	.166	81	.475	.309	0.98	S 32 W	7.32	11.53	38.2	28.6	9.6	.055	3.0	0.2	1.2	.075	4.2
28	30.43	.139	81	.602	.464	0.95	S 30 E	2.41	5.52	37.0	27.8	9.2	...	...	2.0	5.0	.200	5.0
29	35.73	.177	84	.334	.157	0.93	S 78 W	6.84	7.10	39.0	29.2	9.8	*	0.5	...	...	*	0.5
30	31.33	.137	77	.486	.350	0.87	S 81 W	8.34	8.42	34.0	30.5	3.5	...	...	0.5	2.8	.050	2.8
	37°.14	0.178	79	29.537	29.359	0.74	N 46° W	1.94	7.44	42°.39	31°.99	10°.40	4.294	48.1	3.2	17.4	4.614	65.5

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—DECEMBER, 1861.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°						°	Miles.	Miles.	°	°	°						
1	...	...	...	...	...	...	West	1.87	1.87	29.5	25.8	3.7	...	...	3.0	10.0	0.300	10.0
2	19.98	0.090	83	29.588	29.498	0.25	N 75 W	5.47	6.41	28.4	14.2	14.2	...	...	*	0.5	*	0.5
3	14 25	.068	83	.827	.758	0.05	N 23 W	3.71	3.84	21.0	10.7	10.3	...	...	*	0.2	*	0.2
4	28.03	.133	85	.714	.581	0.53	S 42 W	9.98	10.23	34.4	8.0	26.4	...	...	...	...	...	...
5	34.63	.156	77	.861	.705	0.47	N 72 E	2.31	2.37	40.8	26.3	14.5	*	1.5	...	...	*	1.5
6	41.92	.237	89	.937	.700	0 47	S 23 E	0.90	1.76	46.4	34 4	12.0	...	...	...	...	...	...
7	47.92	.299	89	.674	.375	0.98	S 38 W	6.24	6.37	52.0	39.5	12.5	.210	7.0	...	...	.210	7.0
8	...	...	...	...	...	...	S 54 W	0 42	0 77	55.1	45.0	10.1	...	...	...	...	...	...
9	44.60	.279	94	.535	.256	0.98	N 69 E	2.56	2.67	46.5	42.0	4.5	*	0.2	...	...	*	0.2
10	48.45	.329	95	.331	.002	1.00	N 73 W	10.30	14.03	55.2	42.4	12.8	.100	0.5	...	...	.100	0.5
11	26.23	.092	64	.980	.888	0.08	N 49 W	9.70	10.33	32.2	27.3	4.9	...	...	...	...	...	...
12	30.68	.133	78	30.173	30.040	0.30	S 54 W	6.41	6.50	35.6	18.8	16.8	...	...	...	...	...	...
13	35.15	.147	71	30.008	29.861	0.50	S 55 W	4.29	4.35	41.6	30.0	11.6	...	...	...	...	...	...
14	37.75	.156	70	29.761	.605	0.60	N 76 W	5.79	7.04	43.8	32.6	11.2	...	...	...	...	...	...
15	...	...	...	...	...	...	S 60 W	5.46	6.40	38.0	28.2	9.8	...	...	...	...	...	...
16	42.45	.195	72	.591	.396	0.78	N 86 W	9.18	12.46	51.0	32.0	19.0	...	...	...	...	...	...
17	35.78	.160	75	702	.542	0.83	S 12 E	2.80	7.14	41.0	29.4	11.6	...	...	...	...	...	...
18	35.67	.141	69	.765	.624	0.17	N 34 W	3.05	6.85	43.2	31.8	11.4	...	...	...	...	...	...
19	41.78	.217	81	.521	.304	1.00	N 84 W	8.56	10.83	48.0	30.2	17.8	*	0.2	...	...	*	0.2
20	21.95	.092	73	.817	.725	0.82	N 44 W	13.27	15.04	29.8	20 2	9.6	...	...	0.1	1.0	.010	1.0
21	16.48	.068	74	30.072	30.004	0.63	S 86 W	5.33	6.26	23.0	12.0	11.0	...	...	...	...	...	...
22	...	...	...	...	...	...	N 50 E	7.58	8.52	30.5	13.2	17.3	...	...	2.5	7.3	.250	7.3
23	23.73	.107	85	29.333	29 226	0.90	N 23 W	15.62	16.71	26 2	24.0	2.2	...	...	0.5	7.5	.050	7.5
24	11.68	.068	91	.741	.673	0.15	N 22 W	7.01	7.61	20.0	8.0	12.0	...	...	...	...	...	...
25	...	...	...	...	...	...	N 78 E	8.40	9.49	28.4	5.5	22.9	...	...	...	...	...	...
26	33.03	.173	91	.467	.294	0.98	S 15 W	5.41	14.29	41.5	18.2	23.3	.250	9.2	...	...	...	...
27	24.02	.090	70	.874	.784	0.47	N 64 W	18.33	20.27	30.0	24 3	5.7	...	...	0.1	1.5	.250	9.2
28	18.22	.080	79	30.072	.992	0.70	N 88 E	4.75	6.53	27.3	9.5	17.8	...	...	0.6	2.0	.010	1.5
29	...	...	...	...	...	...	N 66 W	3.72	6.15	32.2	18.7	13.5	...	...	...	...	.060	2.0
30	27.22	.105	71	29.902	.797	0.93	N 76 W	3.38	5.24	33.2	27.5	5.7	...	...	...	...	...	...
31	36.60	.175	80	.408	.234	0.83	S 42 W	8.44	8.56	42.2	21.5	20.7	...	...	...	...	...	...
	31°.13	0.151	79	29.746	29.595	0.62	N 72° W	3.50	7.96	37°.03	24°.23	12°.80	0.560	18.6	6.8	30.0	1.240	48.6

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JANUARY, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	30°.68	0.135	70	29.248	29.113	0.70	N 70° W	24.91	26.31	44°.5	32°.0	12°.5	*	0.2	0.1	1.0	.010	1.2
2	12.45	.154	69	.919	.866	0.12	N 31 W	14.43	14.50	19.0	13.9	5.1	...	...	...	...	...	...
3	2.42	.036	73	.968	.872	0.68	N 3 E	8.87	9.07	8.2	−2.6	10.8	...	...	...	...	...	...
4	6.25	.037	63	.788	.751	0.18	N 5 W	4.09	4.30	11.0	−1.8	12.8	...	...	...	...	...	...
5	...	...	...	...	...	...	N 56 E	7.18	7.52	19.8	0.5	19.3	...	...	1.0	0.4	.100	4.0
6	17.32	.081	85	.471	.390	0.80	N 9 E	3.96	4.93	21.8	11.0	10.8	...	...	0.3	3.0	.030	3.0
7	22.60	.094	78	.941	.847	0.43	N 75 W	3.82	3.97	30.2	13.2	17.0	...	...	...	...	...	...
8	30.20	.144	84	.745	.600	1.00	S 7 W	6.43	7.77	38.0	17.1	20.9	...	...	0.5	3.5	.050	3.5
9	35.32	.175	85	.626	.451	1.00	S 36 W	4.18	5.07	37.0	29.0	8.0	.005	0.5	...	...	.005	0.5
10	34.40	.161	76	.409	.248	0.75	N 68 W	10.72	15.23	43.2	34.5	8.7	.060	2.5	...	...	.060	2.5
11	15.85	.078	87	.583	.505	0.98	S 85 E	7.53	9.10	27.5	13.0	14.5	...	...	3.0	10.0	.300	10.0
12	...	...	...	...	...	...	N 78 W	11.85	12.40	32.4	13.2	19.2	.050	2.0	0.2	1.5	.070	3.5
13	4.35	.042	78	30.068	30.026	0.53	N 20 W	7.21	8.40	7.1	1.5	5.6	...	...	...	...	...	...
14	12.00	.061	76	.151	.091	0.60	N 83 E	6.11	9.28	23.8	−2.0	25.8	...	...	4.0	4.0	.400	4.0
15	27.60	.136	90	29.329	29.194	0.98	S 64 W	10.57	14.94	32.7	12.2	20.5	...	...	2.5	5.8	.250	5.8
16	14.12	.159	71	.939	.879	0.20	S 87 W	10.38	10.65	20.0	15.7	4.3	...	...	...	...	...	...
17	18.78	.091	87	.974	.883	1.00	N 13 E	4.71	5.20	24.0	2.0	22.0	...	...	1.5	8.7	.150	8.7
18	24.43	.119	91	.680	.561	1.00	N 50 E	6.76	6.82	26.2	20.5	5.7	...	...	3.0	8.0	.300	8.0
19	...	...	...	...	...	...	N 42 E	6.53	6.56	26.2	19.5	6.7	...	...	1.5	5.0	.150	5.0
20	22.37	.096	80	.566	.470	0.68	N 8 E	7.97	8.04	27.4	19.7	7.7	...	...	0.5	4.0	.050	4.0
21	23.83	.110	85	.737	.627	1.00	N 55 E	7.50	8.23	28.6	15.0	13.6	...	...	0.5	3.0	.050	3.0
22	28.87	.139	87	.687	.548	1.00	N 79 W	2.01	2.90	32.6	23.7	8.9	...	...	0.2	3.0	.020	3.0
23	28.27	.133	86	.770	.637	0.73	N 63 E	0.76	2.02	32.0	25.0	7.0	...	...	0.1	2.0	.010	2.0
24	29.35	.136	83	.719	.583	0.97	N 84 E	10.00	10.34	31.5	26.3	5.2	...	...	1.5	3.0	.150	3.0
25	27.80	.122	81	.331	.208	0.98	S 86 W	4.67	10.07	32.0	22.0	10.0	...	...	5.0	13.7	.500	13.7
26	...	...	...	...	...	...	N 84 W	12.98	13.01	25.8	23.0	2.8	...	...	...	...	...	...
27	16.37	.081	85	30.136	30.055	0.38	N 66 E	2.46	3.46	27.2	5.0	22.2	...	...	...	...	...	...
28	24.00	.119	91	29.748	29.629	1.00	S 84 E	14.09	14.17	29.2	15.4	13.8	*	2.0	2.0	5.5	.200	7.5
29	32.23	.154	84	.503	.349	0.90	N 57 W	3.31	3.98	36.0	19.0	17.0	...	...	...	...	...	...
30	23.38	.096	76	.757	.661	0.52	N 5 W	5.56	7.65	29.8	20.3	9.5	...	...	*	0.2	*	0.2
31	21.30	.097	82	.907	.811	0.53	S 76 E	7.28	7.78	30.2	9.0	21.2	...	...	...	...	...	...
	21°.71	0.103	81	29.727	29.624	0.73	N 26° W	2.69	8.83	27°.58	15°.03	12°.55	0.115	7.2	27.4	88.9	2.855	96.1

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—FEBRUARY, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles.									
1	26.33	0.109	76	29.704	29.595	0.58	N 89° W	4.83	5.01	33°.5	24°.2	9°.3	...	...	*	0.6	*	0.6
2	...	...	...	...	...	...	N 72 W	4.41	5.62	28.4	14.2	14.2	...	...	...	...	...	...
3	19.08	.090	86	.754	.664	1.00	N 76 E	5.71	7.36	24.2	8.0	16.2	...	...	1.2	8.0	.120	8.0
4	20.53	.096	86	.861	.765	0.88	N 63 W	3.35	3.47	25.4	16.8	8.6	...	...	1.0	3.5	.100	3.5
5	24.20	.116	84	.854	.738	0.72	S 72 E	3.95	4.18	32.8	10.2	22.6	...	...	...	...	...	...
6	34.53	.170	85	.309	.139	1.00	N 76 W	9.18	13.39	37.8	29.0	8.8	.125	1.8	0.5	1.3	.175	3.1
7	24.47	.109	81	.726	.617	0.38	N 49 W	6.61	8.08	30.8	27.4	3.4	...	...	...	...	...	...
8	14.90	.077	90	.708	.631	1.00	N 56 E	1.87	2.91	21.0	12.0	9.0	...	...	1.0	6.5	.100	6.5
9	...	...	...	...	...	...	N 80 W	8.98	9.21	21.5	13.7	7.8	...	...	0.4	5.5	.040	5.5
10	19.62	.086	80	.545	.459	0.83	S 18 W	3.90	4.32	25.6	10.5	15.1	...	...	*	0.5	*	0.5
11	28.63	.142	89	.11[illegible]	28.970	1.00	S 16 E	7.39	10.23	32.4	20.3	12.1	...	...	2.5	8.2	.250	8.2
12	29.42	.133	82	.418	29.283	0.95	S 86 W	5.27	6.92	32.5	27.0	5.5	...	...	0.2	1.5	.020	1.5
13	26.70	.131	90	.516	.384	1.00	N 38 E	2.89	6.23	30.0	21.7	8.3	...	...	1.5	8.5	.150	8.5
14	12.03	.061	77	.669	.608	0.52	N 57 W	8.96	9.51	19.0	15.0	4.0	...	...	...	...	...	...
15	9.58	.051	75	.650	.599	0.48	S 67 W	10.93	11.49	17.2	–5.2	22.4	...	...	...	...	...	...
16	...	...	...	...	...	...	N 21 W	1.41	3.04	17.8	2.0	15.8	...	...	...	...	...	...
17	25.70	.132	92	.729	.597	0.87	N 78 E	6.45	8.61	35.2	7.6	27.6	.030	3.7	...	...	.030	3.7
18	32.83	.149	79	.726	.577	1.00	N 88 W	10.60	11.25	37.0	26.0	11.0	...	...	...	...	...	...
19	26.52	.127	98	.610	.483	1.00	N 38 E	11.32	13.06	31.2	22.6	8.6	...	...	8.0	13.8	.800	13.8
20	21.07	.093	83	.746	.653	0.63	N 57 W	10.66	11.29	25.8	20.2	5.6	...	...	1.5	3.0	.150	3.0
21	21.42	.094	81	.738	.645	0.95	S 45 W	1.23	2.38	30.0	9.2	20.8	...	...	*	*	*	*
22	29.72	.144	87	.409	.265	1.00	S 38 E	0.47	1.52	34.0	18.0	16.0	...	...	...	...	...	...
23	...	...	...	...	...	...	N 59 E	3.48	4.19	36.2	26.3	9.9	...	...	2.0	6.0	.200	6.0
24	18.85	.097	84	.482	.385	0.37	N 42 W	18.29	18.72	32.0	13.6	18.4	...	...	3.0	3.0	.300	3.0
25	11.23	.067	88	.982	.915	0.28	N 83 E	2.84	4.36	25.5	–4.5	30.0	...	...	...	...	...	...
26	28.13	.142	92	.400	.258	1.00	N 55 E	4.04	8.19	31.0	12.5	18.5	.025	8.5	0.3	3.0	.055	11.5
27	20.30	.085	77	.409	.324	0.78	N 68 W	19.76	19.83	26.0	22.0	4.0	...	...	*	*	*	*
28	14.18	.066	81	.528	.462	0.52	N 48 W	23.99	24.13	17.2	11.1	6.1	...	...	...	...	...	...
	22°.50	0.107	84	29.608	29.501	0.78	N 55° W	3.93	8.52	28°.25	15°.41	12°.84	0.180	14.0	23.1	73.4	2.490	87.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MARCH, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
1	17°.75	0.075	76	29.638	29.564	0.05	N 42° W	10.78	11.17	28°.0	11°.6	16°.4	...	...	0.5	2.0	.050	2.0
2	...	...	...	...	...	..	N 58 E	9.92	10.55	28.0	8.0	20.0	...	...	...	..	...	...
3	30.70	.163	94	.059	28.896	1.00	S 79 E	7.90	16.73	34.9	19.0	15.9	.700	12.5	3.0	5.0	1.000	17.5
4	23.78	.107	83	.137	29.030	0.98	S 67 W	8.36	10.81	26 2	21.5	4.7	...	...	...	...	...	...
5	23.07	.103	82	.291	.188	0.72	S 87 W	7.83	8.10	29.5	20.3	9.2	...	...	*	0.2	*	0.2
6	24.68	.111	83	.347	.236	0.90	S 83 W	7.72	8 40	39.5	15.5	14.0	...	...	...	...	...	...
7	32.83	.147	78	.497	.349	0.80	N 65 W	5.22	5.61	39.5	23.8	15.7	...	...	...	...	...	...
8	34.52	.153	77	.696	.543	1.00	N 76 W	2.50	4.19	37.2	32.0	5.2	...	...	...	...	...	...
9	...	...	...	...	...	...	S 72 E	7.36	7.91	39.0	32.0	7.0	.370	4.5	...	...	.370	4.5
10	35.95	.190	88	.353	.163	0.67	S 81 W	9.77	11.50	39.0	33.0	6.0	.160	4.0	...	...	.160	4.0
11	30.38	.137	81	.628	.491	0.23	S 60 W	6.93	7.55	37 8	24.8	13.0	...	...	...	...	...	...
12	27.02	.107	74	.702	.595	0.57	N 45 W	8.35	12.46	35.0	22.8	12.2	...	...	0.1	0.5	.010	0.5
13	25.25	.111	81	.761	.650	1.00	N 75 E	12 28	12.35	28.0	20.3	7.7	...	...	0.1	2.1	.010	2.1
14	29.25	.139	86	.628	.489	1.00	N 61 E	8.04	8.59	32.0	25.0	7.0	.525	13.0	...	...	.525	13.0
15	31.63	.171	96	.254	.082	1.00	N 48 E	10.33	10.44	33.2	29.8	3.4	.745	14.0	3.0	9.0	1.045	23.0
16	...	...	...	...	...	...	N 28 E	3.77	4.60	32.0	27 0	5.0	*	*	1.0	4.0	.100	4.0
17	29.58	.144	87	.475	.331	0.72	N 23 W	4.68	5.23	35.0	20.7	14 3	...	...	...	...	...	...
18	28.75	.121	78	.764	.643	0.00	N 49 W	1.56	3.97	37.0	23.0	14.0	...	...	...	...	...	...
19	28.22	.120	78	.743	.623	0.43	N 56 E	3.00	4.51	37.6	14.8	22.8	...	...	...	...	...	...
20	30.97	.131	75	.542	.411	0.75	N 80 E	16.89	17.11	34.5	25 8	8.7	...	...	9.0	7.8	.900	7.8
21	31.57	.170	96	.174	.004	1.00	N 63 E	9.14	11.57	33.1	29.2	3.9	...	...	1.5	14.5	.150	14.5
22	31.90	.165	91	.081	28.916	0.75	N 85 W	3.67	4.59	37.8	29.0	8.8	020	2.5	0.2	5.2	.040	7.7
23	...	...	...	...	...	...	N 34 W	12.26	12.50	40.5	26.6	13.9	...	...	...	...	...	...
24	26.60	.117	82	.391	29.274	0 93	N 39 W	13.64	13.80	31.5	25.6	5.9	...	...	0.1	2.5	.010	2.5
25	23.80	.101	78	.557	.455	0.02	N 50 W	7.01	7.25	34.0	15.4	18.6	...	...	...	...	...	...
26	26.30	.111	77	.654	.543	0.10	S 82 W	3.21	4.01	35.6	12.0	23.6	...	...	...	...	...	...
27	32.32	.120	67	.671	.551	0.47	N 68 W	8.18	8.87	43.2	20.7	22.5	...	...	...	...	...	...
28	27.27	.105	72	.731	.626	0.18	N 2 E	7.90	8 94	35.2	23.8	11.4	...	...	...	...	...	...
29	27.98	.119	77	.730	.611	0.42	N 89 E	10.74	11.00	32.4	20.3	12.1	...	...	...	...	...	...
30	...	...	...	...	...	...	S 72 E	7.53	11.32	37.5	29.8	7.7	.040	3.5	...	...	.040	3.5
31	36.43	.182	85	.587	.405	0.82	N 78 W	14.31	15.12	40.0	33.5	6.5	...	...	...	...	...	...
	28°.79	0.132	82	29.504	29.372	0.63	N 12° W	2.50	9.38	34°.64	23°.12	11°.52	2.560	54.0	18.5	52.8	4.410	106.8

* Inappreciable

GENERAL METEOROLOGICAL ABSTRACT.—APRIL, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	31°.23	0.164	83	29.889	29.725	0.42	N 50° E	2.54	5.77	39°.6	30°.4	9°.2	...	...	...	...	...	...
2	39.27	.192	80	.434	.241	0.87	S 62 E	3.71	15.58	45.7	29.8	15.9	.010	1.0	...	...	.010	1.0
3	40.25	.179	72	.745	.566	0.77	N 77 W	8.07	10.24	45.4	34.2	11.2	...	...	...	...	...	...
4	32.30	.149	81	.784	.535	0.88	N 86 E	15.47	15.90	36.0	31.6	4.4	...	...	0.1	1.5	.010	1.5
5	36.40	.168	79	.378	.210	0.85	S 87 W	6.45	12.51	41.8	30.4	11.4	.355	5.0	0.1	0.8	.365	5.8
6	...	...	...	...	...	...	N 69 W	11.85	12.03	35.0	28.8	6.2	...	...	*	*	*	*
7	26.17	.117	82	.874	.757	0.72	N 72 E	8.44	9.41	31.2	14.5	16.7	...	...	...	...	...	...
8	29.90	.132	79	.647	.514	1.00	N 80 E	19.97	19.99	32.2	26.2	6.0	...	...	...	...	...	...
9	33.22	.131	69	.576	.445	0.95	N 72 E	11.17	11.83	36.8	29.0	7.8	...	...	...	...	...	...
10	35.67	.146	70	.901	.755	0.00	N 32 E	2.71	5.00	43.0	28.1	14.9	...	...	...	...	...	...
11	37.08	.145	66	30.092	.948	0.10	N 20 E	1.70	4.79	46.4	30.0	16.4	...	...	...	...	...	...
12	39.73	.128	53	.017	.889	0.35	N 85 E	10.42	10.43	45.2	30.0	15.2	...	...	...	...	...	...
13	...	...	...	...	...	...	N 77 E	6.74	6.99	45.8	36.0	9.8	.020	1.0	...	...	.020	1.0
14	46.37	.247	79	29.792	.545	0.93	N 88 E	3.84	4.18	57.0	39.8	17.2	...	...	...	...	...	...
15	49.25	.288	82	.839	.551	0.63	N 81 E	6.11	6.17	55.4	40.5	14.9	*	1.5	...	...	*	1.5
16	54.32	.338	79	.721	.383	0.85	S 67 E	2.58	3.34	66.8	44.5	22.3	.005	0.5	...	...	.005	0.5
17	56.85	.334	82	.747	.363	0.98	N 89 W	4.27	6.93	68.0	51.4	16.6	.130	5.5	...	...	.130	5.5
18	...	...	...	...	...	...	N 74 W	5.25	8.98	57.0	45.2	11.8	.115	5.0	...	...	.115	5.0
19	41.30	.177	68	.772	.595	0.82	N 49 W	4.54	7.82	47.8	37.0	10.8	...	...	...	...	...	...
20	...	...	...	...	...	...	N 87 E	5.44	7.48	44.8	35.0	9.8	...	...	...	...	...	...
21	37.40	.199	89	.431	.232	1.00	N 82 E	18.93	18.95	38.8	34.6	4.2	1.555	21.2	...	...	1.555	21.2
22	39.83	.217	87	.167	28.959	0.97	N 64 W	11.68	14.04	48.0	36.6	11.4	.020	2.0	...	...	.020	2.0
23	31.12	.147	84	.595	29.448	0.53	N 68 W	17.30	18.11	33.8	28.0	5.8	...	...	*	1.5	*	1.5
24	35.92	.126	59	.801	.676	0.07	S 55 W	3.97	9.84	46.0	29.2	16.8	...	...	...	...	...	...
25	35.00	.111	58	.888	.777	0.50	N 85 E	4.42	5.37	43.2	27.8	15.4	...	...	...	...	...	...
26	39.87	.138	56	.977	.839	0.40	S 87 E	3.99	5.40	48.0	27.9	20.1	...	...	...	...	...	...
27	...	...	...	...	...	...	N 76 E	7.17	8.08	49.0	35.0	14.0	...	...	...	...	...	...
28	48.10	.235	70	.614	.379	0.92	S 81 W	5.35	10.76	56.4	41.5	14.9	.025	1.0	...	...	.025	1.0
29	43.97	.157	57	.763	.606	0.38	N 38 W	9.30	9.54	52.2	39.4	12.8	...	...	...	...	...	...
30	45.45	.188	61	.702	.515	0.28	N 87 E	6.30	7.77	54.0	30.5	23.5	...	...	...	...	...	...
	39°.56	0.184	73	29.726	29.542	0.65	N 50° E	2.48	9.77	46°.34	33°.43	12°.91	2.235	43.7	0.2	3.8	2.255	47.5

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—MAY, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	42°.27	0.235	87	29.514	29.279	1.00	N 82° E	14.34	14.37	49°.0	41°.6	7°.4	0.255	8.5	...	...	0.255	8.5
2	44.37	.257	88	.433	.176	0.73	S 20 W	4.34	6.77	53.5	39.8	13.7	.135	3.0	...	...	.135	3.0
3	46.43	.239	76	.523	.284	0.90	S 62 W	6.68	8.03	53.2	39.2	14.0	.007	0.5	...	...	.007	0.5
4	...	...	...	...	...	...	N 45 W	1.36	5.94	55.0	36.5	18.5	...	...	...	...	...	...
5	46.45	.230	73	.449	.219	0.88	N 39 W	11.10	12.27	54.6	40.0	14.6	...	...	...	...	...	...
6	52.35	.218	56	.410	.192	0.77	N 53 W	16.38	17.14	63.8	43.0	20.8	...	...	...	...	...	...
7	45.90	.145	48	.577	.432	0.15	N 30 W	10.34	10.43	52.6	40.2	12.4	...	...	...	...	...	...
8	51.97	.237	61	.722	.485	0.20	N 80 W	6.22	8.19	68.0	32.4	35.6	...	...	...	...	...	...
9	65.48	.286	45	.590	.304	0.17	N 57 W	16.23	16.33	78.5	41.5	37.0	...	...	...	...	...	...
10	60.33	.271	52	.627	.356	0.00	N 26 W	15.09	15.81	70.5	54.6	15.9	...	...	...	...	...	...
11	...	...	...	...	...	...	S 47 W	1.64	3.24	59.6	40.2	19.4	...	...	...	...	...	...
12	58.03	.304	63	.695	.391	0.33	S 38 W	4.85	5.65	67.5	39.4	28.1	*	*	...	...	*	*
13	50.20	.324	88	.592	.267	0.73	N 35 E	3.14	3.98	60.0	46.0	14.0	0.160	1.0	...	...	.160	1.0
14	52.43	.234	60	.734	.500	0.00	N 69 E	5.37	6.85	62.2	42.6	19.6	...	...	...	...	...	...
15	56.20	.253	57	.778	.525	0.17	N 73 E	1.53	2.73	65.5	44.4	21.1	...	...	...	...	...	...
16	59.93	.375	72	.731	.356	0.00	S 42 E	0.78	1.17	74.0	43.6	30.4	...	...	...	...	...	...
17	60.75	.391	73	.575	.184	0.08	S 62 E	1.73	2.03	72.4	49.0	23.4	...	...	...	...	...	...
18	...	...	...	...	...	...	S 89 W	6.48	10.21	71.8	51.6	20.2	...	...	...	...	...	...
19	41.87	.182	69	.507	.325	1.00	N 68 W	8.35	8.55	45.6	40.8	4.8	...	...	...	...	...	...
20	44.08	.204	70	.664	.461	0.50	S 73 E	4.80	6.55	51.0	32.6	18.4	...	...	...	...	...	...
21	49.25	.287	81	.452	.165	0.78	S 58 E	4.62	12.67	56.0	42.0	14.0	0.855	9.3	...	...	.855	9.3
22	54.37	.291	68	.597	.307	0.50	S 69 W	10.97	12.92	64.4	47.8	16.6	...	...	...	...	...	...
23	50.45	.181	52	.789	.608	0.10	N 55 W	13.64	13.83	59.8	47.1	12.7	...	...	...	...	...	...
24	46.07	.183	58	.853	.670	0.12	S 7 E	1.43	4.31	53.5	33.8	19.7	...	...	...	...	...	...
25	...	...	...	...	...	...	S 15 W	4.63	4.96	58.5	37.0	21.5	...	...	...	...	...	...
26	52.38	.268	68	.521	.253	0.72	S 80 E	3.20	3.42	59.2	42.5	16.7	0.015	0.8	...	...	.015	0.8
27	58.28	.327	67	.363	.036	0.70	N 38 W	6.03	9.58	71.4	49.6	21.8	*	0.1	...	...	*	0.1
28	51.23	.193	53	.603	.410	0.03	N 30 W	6.65	6.78	63.0	41.2	21.8	...	...	...	...	...	...
29	55.15	.227	52	.587	.360	0.20	S 58 W	1.36	3.22	64.1	36.0	28.1	...	...	...	...	...	...
30	55.08	.238	54	.508	.270	0.67	E	1.79	2.48	60.0	44.8	15.2	...	...	...	...	...	...
31	57.40	.242	52	.521	.279	0.65	N 56 E	3.01	3.51	66.2	41.4	24.8	...	...	...	...	...	...
	52°.17	0.253	65	29.590	29.337	0.45	N 52° W	2.80	7.87	61°.43	42°.01	19°.43	1.427	23.2			1.427	23.2

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JUNE, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
	°							Miles.	Miles.									
1	...	...	...	...	...	...	N 82° E	3.04	3.10	63°.0	49°.6	13°.4	...	...	...	...	...	...
2	56.28	0.352	77	29.433	29.081	0.87	N	2.27	3.29	63.0	46.0	17.0	...	...	...	...	...	...
3	56.33	.343	76	.679	.336	1.00	N 35 E	4.23	4.81	62.5	53.0	9.5	...	...	...	...	...	...
4	56.15	.244	55	.772	.528	0.57	N 56 E	5.41	7.00	64.5	54.4	10.1	...	...	...	...	...	...
5	60.95	.293	53	.755	.462	0.18	S 86 E	0.77	1.80	70.0	48.8	21.2	..	...	...	...	...	...
6	60.92	.335	62	.549	.214	0.77	S 81 E	1.07	2.16	71.4	44.0	27.4	...	...	...	...	...	...
7	57.47	.322	67	.556	.234	0.62	N 16 E	3.61	5.52	63.0	53.8	9.2	.005	1.0	...	...	.005	1.0
8	...	...	...	...	...	...	N 7 W	1.61	3.93	64.8	51.2	13.6	...	...	...	...	...	...
9	59.18	.260	52	.778	.518	0.22	S 34 W	2.31	3.14	68.4	39.4	29.0	...	...	...	...	...	...
10	61.58	.316	58	.652	.336	0.93	S 1 E	1.43	1.66	76.0	47.0	29.0	...	...	...	...	...	...
11	61.17	.379	71	.395	.015	0.75	S 34 W	2.44	2.87	71.0	50.8	20.2	...	...	...	...	...	...
12	68.25	.461	67	.314	28.853	0.85	N 72 W	6.85	8.75	80.8	53.4	27.4	.010	0.7	...	...	.010	0.7
13	61.58	.365	64	.458	29.093	0.70	N 54 W	4.87	6.42	69.0	57.4	11.6	...	...	...	...	...	...
14	58.33	.310	63	.577	.267	0.85	N 41 E	1.87	5.40	67.0	53.2	13.8	.025	1.0	...	...	.025	1.0
15	...	...	...	...	...	...	N 6 E	8.77	9.82	65.0	50.8	14.2	...	...	...	...	...	...
16	53.28	.231	58	.981	.751	0.28	S 88 E	4.39	5.04	60.6	43.8	16.8	...	...	...	...	...	...
17	62.85	.421	73	.463	.042	0.62	S 25 W	8.37	9.20	73.0	41.2	31.8	.037	0.6	...	...	.037	0.6
18	59.90	.458	88	.214	28.756	1.00	N 79 W	2.24	8.78	67.2	56.0	11.2	.650	7.0	...	...	.650	7.0
19	52.10	.286	72	.394	29.107	0.62	N 38 W	5.26	7.10	60.4	49.3	11.1	.025	1.5	...	...	.025	1.5
20	54.57	.316	74	.512	.196	0.63	S 25 W	4.18	5.33	63.5	41.6	21.9	.112	3.0	...	...	.112	3.0
21	58.05	.296	62	.659	.363	0.20	N 55 W	8.74	10.69	71.0	46.8	24.2	...	...	...	...	...	...
22	...	...	...	...	...	...	S 35 W	1.41	4.83	65.2	42.0	23.2	...	...	...	...	...	...
23	57.13	.387	83	.688	.301	0.97	N 68 E	6.76	7.06	61.8	52.4	9.4	.105	6.7	...	...	.105	6.7
24	56.70	.386	84	.588	.202	0.73	N 37 E	3.83	5.56	61.6	55.4	6.2	.013	2.1	...	...	.013	2.1
25	64.05	.371	63	.646	.275	0.20	N 46 W	5.36	9.17	74.0	51.2	22.8	...	...	...	...	...	...
26	73.32	.304	38	.623	.319	0.57	N 38 W	7.46	7.86	85.4	64.0	21.4	...	...	...	...	...	...
27	70.52	.398	53	.567	.169	0.30	S 53 W	4.17	6.57	79.6	55.2	24.4	...	...	...	...	...	...
28	69.57	.415	59	.506	.091	0.53	S 71 E	1.45	3.21	81.0	58.0	23.0	...	...	...	...	...	...
29	...	...	...	...	...	...	N 19 W	2.36	3.99	77.0	58.5	18.5	.025	2.5	...	...	.025	2.5
30	62.85	.393	67	.347	28.955	0.05	N 34 W	14.99	15.29	72.8	61.0	11.8	...	...	...	...	...	...
	60°.52	0.346	66	29.564	29.219	0.60	N 26° W	1.77	5.98	69°.12	50°.97	18°.14	1.007	26.1	...	...	1.007	26.1

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—JULY, 1862.

Days.	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	60°.53	0.301	58	29.409	29.109	0.22	S 10° W	4.65	5.66	70°.2	49°.8	20°.4	...	...	...	...	...	...
2	61.47	.326	60	.498	.173	0.35	S 76 E	2.97	3.33	70.8	50.2	20.6	...	...	...	...	...	...
3	65.60	.461	74	.775	.314	0.00	S 51 E	1.86	2.83	77.0	49.8	27.2	...	...	...	...	...	...
4	72.22	.548	70	.875	.327	0.03	S 12 W	3.53	3.97	83.8	55.0	28.8	...	...	...	...	...	...
5	77.58	.598	64	.747	.149	0.38	S 41 W	6.42	6.88	90.2	63.0	27.2	...	...	...	...	...	...
6	...		...	...	...	...	N 62 W	6.51	9.43	95.5	67.8	27.7	...	...	...	...	...	...
7	71.42	.447	58	.431	28.984	0.78	S 72 W	2.35	3.02	82.5	61.2	21.3	...	...	...	...	...	...
8	73.67	.557	68	.342	28.785	0.80	S 7 W	2.13	3.36	82.6	61.0	21.6	0.320	2.0	...	...	0.320	2.0
9	69.63	.488	69	.319	28.831	0.82	N 28 W	8.23	8.45	79.5	64.6	14.9	.047	0.8	...	...	.047	0.8
10	65.55	.300	51	.635	29.335	0.67	N 19 W	7.75	8.03	76.0	54.2	21.8	...	...	...	...	...	...
11	63.32	.390	68	.670	.280	0.68	S 17 W	1.66	3.08	77.5	48.2	29.3	...	...	...	...	...	...
12	70.77	.473	64	.433	28.959	0.98	S 67 W	6.62	7.25	83.9	52.0	31.9	*	0.1	...	...	*	0.1
13	...	...	...	...	...	...	S 56 W	7.55	8.38	80.4	62.6	17.8	.625	8.0	...	...	.625	8.0
14	64.78	.512	83	.443	28.931	0.68	N 89 E	3.48	5.16	74.2	62.0	12.2	*	0.1	...	...	*	0.1
15	64.28	.553	92	.466	28.913	0.77	N 44 E	2.80	5.32	73.0	59.8	13.2	.140	2.0	...	...	1.40	2.0
16	63.32	.424	73	.599	29.175	0.65	N 26 W	7.13	8.30	70.6	61.0	9.6	...	...	...	...	...	...
17	61.52	.389	71	.698	.309	0.47	N 86 E	2.71	6.10	68.8	50.4	18.4	...	...	...	...	...	...
18	63.82	.429	72	.715	.286	0.85	N 81 E	8.37	8.47	69.5	54.0	15.5	...	...	...	...	...	...
19	66.70	.565	86	.533	28.968	0.92	S 80 E	4.73	5.29	72.0	62.3	9.7	1.335	4.5	...	...	1.335	4.5
20	...	...	...	...	...	...	N 77 W	6.69	8.13	78.8	63.8	15.0	0.290	1.6	...	...	.290	1.6
21	64.23	.545	91	.499	28.954	1.00	N 6 E	0.33	1.37	67.2	61.4	5.8	.005	1.0	...	...	.005	1.0
22	67.35	.569	85	.545	28.976	1.00	S 42 E	4.18	5.07	72.8	62.8	10.0	.352	3.0	...	...	.352	3.0
23	70.23	.510	71	.310	28.801	0.52	N 76 W	5.72	7.56	81.0	66.2	14.8	.880	2.5	...	...	.880	2.5
24	63.27	.473	81	.409	28.936	0.65	S 83 W	4.94	5.95	70.8	54.0	16.8	.090	1.0	...	...	.090	1.0
25	62.67	.384	68	.498	29.114	0.07	S 71 W	4.40	6.60	72.0	51.8	20.2	.005	1.0	...	...	.005	1.0
26	66.57	.411	65	.567	.156	0.23	N 72 W	3.98	6.86	76.8	56.0	20.8	...	...	...	...	...	...
27	...	...	...	...	...	...	S 7 W	2.76	3.75	75.0	53.4	21.6	...	...	...	...	...	...
28	64.75	.532	87	.528	28.996	0.83	S 34 W	4.00	5.18	72.0	60.0	12.0	.815	6.3	...	...	.815	6.3
29	66.93	.551	83	.502	28.951	0.67	S 56 W	1.95	4.47	73.0	60.4	12.6	.440	1.5	...	...	.440	1.5
30	68.48	.489	71	.628	29.139	0.17	N 38 W	7.52	8.18	75.0	63.0	12.0	...	...	...	...	...	...
31	70.25	.534	72	.701	.167	0.03	S 87 W	0.91	4.43	76.5	60.5	16.0	...	...	...	...	...	...
	66°.70	0.473	7	29.547	29.075	0.56	S 89° W	1.42	5.80	76°.42	58°.14	18°.28	5.344	35.4	...	...	5.344	35.4

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—AUGUST, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles	Miles.									
1	72.72	0.567	71	29.651	29.085	0.37	S 63° W	3.11	6.14	81°.1	60°.0	21°.1	...	...	...	...	...	...
2	71.82	.565	73	.641	.076	0.45	N 69 E	2.69	3.71	79.8	66.4	13.4	.006	0.5	...	...	.006	0.5
3	...	...	...	...	...	...	S 73 E	4.30	5.33	79.5	65.4	14.1	...	...	...	...	...	...
4	77.22	.737	79	.539	28.807	0.60	S 24 W	8.60	8.93	84.0	68.8	15.2	...	...	...	...	...	...
5	70.17	.583	79	.588	29.005	0.65	N 64 W	6.57	7.60	79.8	70.2	9.6	*	0.1	...	...	*	0.1
6	66.80	.460	70	.772	.312	0.28	S 70 W	1.27	5.03	75.5	53.5	22.0	.045	1.5	...	...	.045	1.5
7	69.65	.588	81	.673	.085	0.78	S 39 E	2.15	4.64	76.5	63.0	13.5	.312	2.0	...	...	.312	2.0
8	79.08	.772	79	.441	28.669	0.40	S 54 W	6.55	7.20	89.5	70.0	19.5	*	0.2	...	...	*	0.2
9	73.73	.639	76	.378	28.738	0.53	N 70 W	9.28	10.05	84.6	71.5	13.1	.038	0.5	...	...	.038	0.5
10	...	...	...	...	...	...	N 75 E	3.60	4.46	76.2	60.5	15.7	...	...	...	...	...	...
11	71.33	.610	79	.486	28.876	0.42	S 89 W	2.46	6.00	79.8	58.6	21.2	.051	1.0	...	...	.051	1.0
12	67.88	.393	59	.677	29.284	0.12	N 49 W	9.44	10.00	79.0	59.2	19.8	...	...	...	...	...	...
13	63.15	.383	68	.771	.388	0.40	S 5 E	1.57	3.99	79.4	55.3	24.1	...	...	...	...	...	...
14	62.17	.492	88	.516	.024	0.70	S 77 W	4.05	5.19	69.2	56.8	12.4	.618	10.0	...	...	.618	10.0
15	61.10	.323	61	.657	.334	0.52	N 40 W	8.51	8.92	69.5	52.8	16.7	...	...	...	...	...	...
16	58.80	.368	73	.896	.528	0.18	N 65 W	2.15	4.52	68.8	52.5	16.3	...	...	...	...	...	...
17	...	...	...	...	...	...	S.	3.42	3.92	70.8	46.0	24.8	...	...	...	...	...	...
18	64.42	.459	76	.688	.229	0.55	N 8 E	2.27	4.76	74.0	53.5	20.5	.420	0.8	...	...	.420	0.8
19	64.97	.445	72	.650	.205	0.23	S 43 E	1.79	3.28	75.0	54.2	20.8	...	...	...	...	...	...
20	68.57	.517	73	.682	.165	0.30	N 59 W	0.70	4.64	79.0	55.5	23.5	...	...	...	...	...	...
21	68.85	.552	78	.622	.071	0.75	S 81 E	5.11	5.60	74.8	55.0	19.8	.331	3.0	...	...	.331	3.0
22	68.80	.580	81	.408	28.828	0.65	S 79 W	5.68	7.55	79.2	65.8	13.4	.433	4.5	...	...	.433	4.5
23	62.55	.357	64	.687	29.330	0.13	N 25 W	7.38	9.49	75.8	55.8	20.0	...	...	...	...	...	...
24	...	...	...	...	...	...	N 65 E	4.97	5.79	62.0	48.4	13.6	...	...	...	...	...	...
25	66.07	.463	70	.678	.215	0.48	S 42 W	2.93	3.62	75.8	49.0	26.8	.038	0.5	...	...	.038	0.5
26	72.68	.582	74	.504	28.922	0.47	S 79 W	2.58	5.28	84.0	63.6	20.4	.242	3.0	...	...	.242	3.0
27	67.28	.596	89	.482	28.886	1.00	S 67 E	1.51	4.05	71.5	64.2	7.3	.293	6.0	...	...	.293	6.0
28	69.45	.571	80	.400	28.829	0.42	N 60 W	8.33	9.57	78.0	64.0	14.0	...	...	...	...	...	...
29	61.00	.355	64	.681	29.326	0.08	N 27 W	7.29	7.44	71.0	56.2	14.8	...	...	...	...	...	...
30	57.43	.297	63	.848	.551	0.15	S 13 W	1.49	2.65	67.0	42.8	24.2	...	...	...	...	...	...
31	...	...	...	...	...	...	S 36 E	2.58	5.46	69.2	46.2	23.0	.656	3.5	...	...	.656	3.5
	67°.60	0.510	74	29.616	29.106	0.45	N 78° W	1.67	5.96	76°.11	58°.22	17°.89	3.483	37.1	...	...	3.483	37.1

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—SEPTEMBER, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.	Depth in Inches.	Approximate duration in hours.
								Miles.	Miles.									
1	61°.38	0.484	84	29.197	28.713	0.75	N 54° W	12.26	[illegible]	71.0	63°.6	7°.4	...	...	...	...	...	...
2	47.45	.221	68	.617	29.396	0.20	N 27 W	8.67	[illegible]	59.0	42.0	17.0	...	...	...	...	...	...
3	55.50	.319	71	.742	.422	0.23	S 7 W	2.84	3.19	64.8	39.0	25.8	...	...	...	...	...	...
4	64.45	.483	80	.696	.213	0.17	S 28 W	5.65	5.71	75.2	52.8	22.4	...	...	...	...	...	...
5	69.32	.557	78	.624	.067	0.78	S 27 W	3.47	3.58	79.4	57.5	21.9	0.800	3.3	...	...	0.800	3.3
6	69.63	.664	92	.555	28.891	1.00	S 22 W	1.68	2.41	77.0	64.2	12.8	.560	6.1	...	...	.560	6.1
7	...	...	...	...	...	...	S 37 W	7.52	7.67	75.5	64.8	10.7	.040	2.3	...	...	.040	2.3
8	67.27	.450	68	.568	29.118	0.68	N 79 W	8.76	9.87	75.5	65.0	10.5	...	...	...	...	...	...
9	57.97	.398	82	.879	.481	0.03	N 64 E	1.14	2.09	65.0	49.4	15.6	...	...	...	...	...	...
10	61.03	.403	74	.837	.434	0.00	N 77 E	2.42	2.87	69.0	49.8	19.2	...	...	...	...	...	...
11	66.22	.508	78	.669	.161	0.28	S 69 E	2.12	3.18	74.0	54.4	19.6	.007	1.0	...	...	.007	1.0
12	61.55	.430	77	.696	.266	0.73	N 27 W	10.97	11.64	68.8	63.2	5.6	.005	0.5	...	...	.005	0.5
13	48.70	.280	81	.980	.700	0.53	N 68 E	2.67	3.75	55.0	44.8	10.2	...	...	...	...	...	...
14	...	...	...	...	...	...	N 12 E	6.82	2.23	62.0	45.0	17.0	...	...	...	...	...	...
15	57.48	.437	91	.786	.349	0.77	N 22 E	2.72	4.06	65.0	48.6	16.4	.037	1.5	...	...	.037	1.5
16	56.97	.366	79	.828	.462	0.58	N 83 E	3.59	3.98	62.2	54.6	7.6	...	...	...	...	...	...
17	62.82	.514	89	.573	.059*	0.55	N 86 E	5.81	6.34	67.0	51.8	15.2	...	...	...	...	...	...
18	66.75	.542	83	.458	28.917	0.70	S 80 W	5.72	6.77	74.0	64.0	10.0	.195	2.2	...	...	.195	2.2
19	58.30	.381	77	.765	29.384	0.50	N 82 W	2.81	4.86	66.8	55.4	11.4	...	...	...	...	...	...
20	58.22	.396	82	.751	.355	0.30	S 32 W	2.69	3.85	67.8	49.8	18.0	...	...	...	...	...	...
21	...	...	...	...	...	...	S 83 E	2.80	3.00	65.0	54.2	10.8	...	...	...	...	...	...
22	62.07	.473	85	.757	.284	0.23	S 10 W	2.28	2.62	73.8	48.4	25.4	...	...	...	...	...	...
23	64.75	.488	80	.557	.068	0.65	S 80 W	2.63	7.29	75.0	53.8	21.2	.385	4.5	...	...	.385	4.5
24	53.40	.270	68	.681	.411	0.35	N 17 W	6.73	6.82	60.2	52.8	7.4	...	...	...	...	...	...
25	54.58	.333	77	.730	.397	0.05	S 26 W	3.55	4.38	64.0	45.0	19.0	...	...	...	...	...	...
26	57.48	.378	78	.720	.342	0.00	S 28 W	2.63	2.99	67.8	45.0	22.8	...	...	...	...	...	...
27	57.42	.395	84	.682	.287	0.53	N 84 E	0.61	1.04	66.2	45.0	21.2	...	...	...	...	...	...
28	...	...	...	...	...	...	S 8 E	0.66	1.50	70.6	52.0	18.6	...	...	...	...	...	...
29	58.88	.415	82	.611	.196	0.62	N 6 E	6.19	6.71	68.0	54.5	13.5	...	...	...	...	...	...
30	49.63	.293	82	.799	.506	1.00	N 64 E	5.08	5.52	...	46.0	...	.315	8.3	...	...	.315	8.3
	59°.59	0.418	80	29.683	29.265	0.47	N 59° W	1.07	5.11	68°.43	52°.77	15°.66	2.344	29.7	...	...	2.344	29.7

GENERAL METEOROLOGICAL ABSTRACT.—OCTOBER, 1862

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
Days.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	50°.27	0.338	92	29.747	29.409	1.00	N 60° E	5.59	5.83	55°.2	43°.0	12°.2	0.085	3.5	...	...	.085	3.5
2	58.47	.473	96	.667	.194	1.00	S 53 E	0.28	0.65	63.2	51.4	11.8	.087	5.0	...	...	.087	5.0
3	60.80	.521	97	.645	.124	1.00	N 78 E	3.48	3.53	62.5	55.9	6.6	.565	10.0	...	...	.565	10.0
4	61.03	.400	72	.499	.099	0.67	N 86 W	15.05	17.21	73.8	59.5	14.3	.072	0.9	...	...	.072	0.9
5	...	...	...	...	...	...	N 28 W	3.70	3.88	60.0	40.4	19.6	...	...	...	...	...	...
6	54.63	.370	85	.555	.185	0.95	S 23 W	4.11	4.76	63.0	39.0	24.0	.185	6.7	...	...	.185	6.7
7	67.55	.593	88	.392	28.799	0.40	S 41 W	6.31	6.32	74.0	55.4	18.6	*	1.0	...	...	*	1.0
8	69.38	.554	77	.394	28.840	0.57	S 52 W	8.27	10.89	76.6	64.0	12.6	.175	2.5	...	...	.175	2.5
9	54.95	.339	78	.736	29.397	1.00	N 7 W	3.08	3.29	58.8	55.5	3.3	.030	4.7	...	...	.030	4.7
10	48.42	.292	86	.634	.342	1.00	N 1 E	8.95	9.53	52.8	49.8	3.0	.270	8.7	...	...	.270	8.7
11	46.15	.242	76	.750	.508	0.47	N 20 W	5.49	5.58	55.0	43.6	11.4	.050	1.5	...	...	.050	1.5
12	...	...	...	...	...	...	N 73 E	3.00	3.81	52.6	35.0	17.6	...	...	...	...	...	...
13	50.10	.310	85	.576	.266	0.60	N 79 E	0.43	1.30	58.4	42.0	16.4	...	...	...	...	...	...
14	46.02	.259	83	.691	.432	0.84	N 25 W	8.01	8.34	58.2	40.4	17.8	...	...	...	...	...	...
15	38.92	.191	81	.821	.630	0.95	N 68 E	2.66	3.43	42.0	34.8	7.2	...	...	...	...	...	...
16	47.03	.290	90	.482	.192	0.93	S 44 W	2.50	3.92	49.4	38.0	11.4	.055	7.9	...	...	.055	7.9
17	44.98	.219	74	.704	.485	0.32	N 65 W	4.70	4.78	53.5	40.8	12.7	...	...	...	...	...	...
18	47.70	.265	79	.788	.523	0.18	S 25 W	5.08	5.35	61.2	33.0	28.2	...	...	...	...	...	...
19	...	...	...	...	...	...	N 61 W	13.03	13.76	55.0	45.2	9.8	.020	2.5	...	...	.020	2.5
20	42.78	.213	76	.615	.402	0.80	S 21 W	8.79	9.09	51.8	29.5	22.3	...	...	...	...	...	...
21	48.77	.302	87	.117	28.815	0.95	S 56 W	6.61	7.40	51.8	43.4	8.4	.635	4.4	...	...	.635	4.4
22	42.77	.206	76	.343	29.137	0.83	N 67 W	16.22	16.57	48.2	40.8	7.4	*	0.2	...	...	*	0.2
23	38.23	.192	83	.858	.666	0.53	S 83 W	2.32	4.80	45.0	33.2	11.8	.040	1.5	...	...	.040	1.5
24	47.45	.253	77	.663	.410	1.00	S 79 W	8.25	11.67	56.0	34.5	21.5	.100	4.0	...	...	.100	4.0
25	35.37	.175	85	.974	.799	0.95	N 11 W	5.61	6.50	39.0	36.0	3.0	...	...	*	1.0	*	1.0
26	...	...	...	...	...	...	N 14 E	5.11	5.57	31.8	29.0	2.8	...	...	0.5	3.0	.050	3.0
27	34.77	.167	83	.540	.373	0.65	N 47 W	3.69	3.82	43.0	26.2	16.8	...	...	...	...	...	...
28	40.43	.216	86	.648	.432	0.95	S 14 E	3.01	3.29	45.4	31.5	13.9	0.315	6.5	...	...	.315	6.5
29	42.13	.223	83	.702	.479	0.60	N 88 W	7.20	7.33	49.0	40.0	9.0	*	*	...	...	*	...
30	44.75	.235	79	.647	.412	0.33	S 24 W	2.09	3.70	53.5	32.8	20.7	*	0.2	...	...	*	0.2
31	51.17	.269	71	.519	.250	0.10	S 42 W	6.19	6.42	59.0	40.8	18.2	...	...	...	...	...	...
	48°.70	0.300	82	29.619	29.319	0.72	N 78° W	2.89	6.53	54°.80	41°.43	13°.36	2.684	71.7	0.5	4.0	2.734	75.7

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—NOVEMBER, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity. Miles.	Mean Velocity. Miles.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
1	50°.35	0.265	72	29.536	29.271	0.28	S 34° W	2.23	2.83	58°.0	39°.0	19°.0	...	...	...	...	...	...
2	...	...	...	...	...	...	N 45 W	10.40	12.26	53.0	44.4	8.6	0.680	5.5	...	...	.680	5.5
3	37.65	.160	70	.578	.418	0.45	N 52 W	10.41	11.55	45.8	36.8	9.0	*	0.2	...	...	*	0.2
4	36.50	.179	81	.796	.617	0.73	S 63 E	2.90	3.58	40.0	26.8	13.2	...	...	...	...	...	...
5	38.37	.185	78	.550	.365	0.95	N 33 W	8.84	8.99	49.3	31.0	18.3	.050	2.5	...	...	.050	2.5
6	28.62	.105	68	.687	.582	0.45	N 25 E	5.31	6.22	33.6	24.4	9.2	...	...	...	...	...	...
7	27.33	.102	69	.775	.673	0.77	N 28 E	7.88	8.13	31.4	22.6	8.8	...	...	0.2	1.0	.020	1.0
8	26.65	.128	89	.736	.607	1.00	N 10 E	5.46	5.99	28.8	23.4	5.4	...	...	0.5	5.5	.050	5.5
9	...	...	...	...	...	...	N 66 W	6.40	6.72	42.0	27.0	15.0	...	...	...	...	...	...
10	37.95	.166	73	.799	.633	0.48	N 53 W	2.89	4.35	46.6	33.5	13.1	...	...	...	...	...	...
11	44.80	.236	79	.494	.258	0.75	S 51 W	5.42	8.55	50.2	31.0	19.2	.045	1.5	...	...	.045	1.5
12	39.33	.182	76	.678	.496	0.95	N 69 W	5.25	5.53	44.0	39.0	5.0	...	...	...	...	...	...
13	39.38	.185	76	.803	.618	0.93	S 55 W	5.60	5.83	42.8	35.0	7.8	...	...	...	...	...	...
14	35.60	.157	75	.933	.776	0.77	N 41 W	9.53	11.97	43.2	35.8	7.4	*	0.2	*	0.5	*	0.7
15	22.80	.099	81	30.427	30.329	0.22	N 50 E	7.31	7.75	27.6	16.2	11.4	...	...	...	...	...	...
16	...	...	...	...	...	...	S 65 E	5.45	6.27	40.0	21.8	18.2	.225	2.9	...	...	.225	2.9
17	43.13	.236	84	29.955	29.719	1.00	N 17 W	3.71	4.49	49.6	35.0	14.6	*	1.2	...	...	*	1.2
18	39.57	.210	86	.895	.685	1.00	N 78 E	2.85	3.37	43.0	35.8	7.2	.260	5.0	*	*	.260	5.0
19	42.58	.262	96	.439	.178	1.00	N 10 E	5.75	5.82	44.2	39.0	5.2	.660	23.0	...	...	.660	23.0
20	34.87	.173	85	.350	.176	0.97	N 7 W	7.93	8.07	38.5	33.8	4.7	.285	9.0	*	7.5	.285	16.5
21	29.68	.145	87	.508	.363	0.70	N 56 W	1.42	1.97	33.4	25.5	7.9	...	...	...	...	...	...
22	31.45	.146	83	.505	.358	0.75	N 30 W	10.54	10.82	37.2	25.5	11.7	...	...	0.2	3.5	.020	3.5
23	...	...	...	...	...	...	N 80 W	10.92	12.11	31.8	23.2	8.6	...	...	0.1	1.5	.010	1.5
24	35.73	.165	79	.592	.427	0.83	S 33 W	8.22	8.48	41.0	26.6	14.4	...	...	...	...	...	...
25	39.40	.199	82	.472	.273	0.98	S 53 W	3.21	3.92	44.0	34.5	9.5	*	0.5	...	...	*	0.5
26	34.57	.154	77	.469	.315	0.95	N 62 W	6.54	6.80	38.5	32.5	6.0	...	...	...	...	...	...
27	31.82	.147	81	.348	:201	1.00	S 34 W	5.32	6.41	34.2	32.0	2.2	...	...	3.0	13.0	.300	13.0
28	30.50	.142	83	.191	.049	0.73	S 67 W	4.25	4.52	35.0	29.1	5.9	...	...	0.2	2.5	.020	2.5
29	30.85	.154	89	.397	.243	1.00	S 43 W	0.74	1.81	36.0	25.0	11.0	...	...	0.6	8.5	.060	8.5
30	...	...	...	...	...	...	N 36 E	1.37	2.90	35.0	29.7	5.3	...	...	0.5	7.5	.050	7.5
	35°.58	0.171	80	29.636	29.465	0.79	N 46° W	3.00	6.60	40°.59	30°.50	10°.09	2.205	51.5	5.3	51.0	2.735	102.5

* Inappreciable.

GENERAL METEOROLOGICAL ABSTRACT.—DECEMBER, 1862.

	DAILY MEANS.						WIND.			EXTREMES OF TEMPERATURE.			RAIN.		SNOW.		RAIN AND MELTED SNOW.	
DAYS.	Temperature of the Air.	Pressure of Vapour.	Relative Humidity.	Barometric Pressure.	Pressure of Dry Air.	Clouded Sky.	Resultant Direction.	Resultant Velocity.	Mean Velocity.	Maximum.	Minimum.	Difference.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.	Depth in inches.	Approximate duration in hours.
								Miles.	Miles.									
1	33.07	0.162	85	29.665	29.503	0.95	N 44 W	5.14	5.51	35°.8	32°.0	3°.8	...	...	3.0	6.5	0.300	6.5
2	24.55	.110	83	.861	.751	0.73	N 63 W	3.80	4.03	29.8	18.2	11.6	...	...	*	0.1	*	0.1
3	28.08	.131	84	.602	.471	0.97	S 12 W	3.10	4.92	31.6	23.5	8.1	...	...	3.0	7.5	.300	7.5
4	29.95	.130	78	.545	.415	0.93	S 81 W	5.33	5.45	34.0	19.4	14.6	...	...	...	...	...	...
5	26.48	.110	76	.352	.242	0.87	N 73 W	7.86	8.87	30.2	20.5	9.7	...	...	...	...	...	...
6	8.97	.050	76	.421	.371	0.25	N 52 W	21.30	21.52	13.6	10.6	3.0	...	...	...	...	...	...
7	...	...	...	...	...	...	N 18 W	6.46	6.92	10.5	−1.5	12.0	...	...	...	...	...	...
	19.38	.102	94	.797	.695	1.00	S 34 E	4.83	7.30	25.8	2.0	23.8	...	...	3.5	11.1	.350	11.0
9	25.53	.122	88	.812	.690	1.00	S 70 W	4.72	7.01	30.6	21.3	9.3	...	...	...	...	...	...
10	34.72	.166	82	.670	.504	0.50	S 49 W	9.94	10.07	38.0	25.9	12.1	...	...	...	...	...	...
11	41.60	.209	79	.549	.340	0.35	S 51 W	11.08	11.68	47.0	34.5	12.5	...	...	...	...	...	...
12	38.37	.177	76	.766	.590	0.82	N 73 E	5.10	6.10	42.0	34.0	8.0	...	...	...	...	...	...
13	40.50	.231	91	.647	.416	1.00	S 75 E	2.52	5.08	45.4	37.0	8.4	0.240	7.0	...	...	.240	7.0
14	...	...	...	...	...	...	S 22 W	2.14	2.59	50.1	39.8	10.3	.210	2.5	...	...	.210	2.5
15	44.27	.293	99	.219	28.926	1.00	N 88 W	4.19	6.93	50.0	44.5	5.5	1.250	15.0	0.2	1.0	1.270	16.0
16	31.42	.135	75	.293	29.158	0.75	N 71 W	14.64	15.69	35.8	32.5	3.3	...	...	0.5	1.3	.050	1.3
17	17.98	.079	81	30.031	.953	0.80	N 23 W	7.38	7.77	21.8	16.0	5.8	...	...	*	0.2	*	0.2
18	27.07	.116	78	29.913	.797	0.83	S 39 W	14.63	15.17	33.0	15.6	17.4	...	...	...	...	...	...
19	16.73	.086	80	30.004	.918	0.18	N 29 W	18.17	18.83	34.0	17.5	16.5	...	...	...	...	...	...
20	5.30	.041	74	30.370	30.329	0.08	N 55 W	2.32	3.53	16.5	−3.4	19.9	...	...	...	...	...	...
21	...	...	...	...	...	...	S 40 E	5.51	5.82	27.0	5.3	21.7	...	...	0.2	2.5	.020	2.5
22	33.08	.160	85	29.655	29.494	0.70	S 72 W	4.05	4.58	39.0	20.7	18.3	...	...	...	...	...	...
23	31.62	.148	82	.872	.724	1.00	N 17 E	4.69	6.53	36.0	31.5	4.5	...	...	...	...	...	...
24	33.48	.168	87	.778	.610	1.00	S 75 E	5.56	5.83	41.0	24.8	16.2	*	0.7	...	...	*	0.7
25	...	...	...	...	...	...	S 52 W	2.47	2.90	46.6	32.6	14.0	...	...	...	...	...	...
26	36.30	.199	93	.265	.066	1.00	N 23 E	4.14	5.74	38.0	35.2	2.8	0.245	16.0	...	...	.245	16.0
27	34.98	.178	88	.444	.266	0.88	N 76 W	4.15	4.57	36.6	32.8	3.8	...	...	...	...	...	...
28	...	...	...	...	...	...	S 44 W	6.43	6.57	39.8	32.8	7.0	...	...	...	...	...	...
29	37.05	.177	80	.546	.369	1.00	N 61 W	5.72	7.37	41.2	33.2	8.0	...	...	...	...	...	...
30	26.68	.108	74	.661	.553	0.85	N 25 E	7.92	8.20	29.0	27.0	2.0	...	...	...	...	...	...
31	21.00	.097	85	.883	.786	0.02	N 13 W	0.94	1.98	27.8	15.0	12.8	...	...	...	...	...	...
	28°.78	0.142	83	29.678	29.536	0.75	N 73° W	3.17	7.58	34°.11	23°.57	10°.54	1.945	41.2	10.4	30.1	2.985	71.3

* Inappreciable.

TABLE I.

Monthly Means of the Temperature of the Air, at each of the observation hours, from 1860 to 1862 inclusive.

Toronto Astronomical Time.		2h	4h	10h	12h	18h	20h	Means.
January ..	1860	26°.31	25°.67	23°.12	21°.68	21°.51	22°.00	23°.38
"	1861	22.86	22.67	19.43	18.51	17.78	17.91	19.86
"	1862	25.01	24.60	21.53	20.44	19.25	19.45	21.71
	Means	24.73	24.31	21.36	20.21	19.51	19.79	21.65
February ..	1860	26°.57	26°.45	21°.66	20°.62	20°.48	21°.17	22°.83
"	1861	28.82	28.45	26.05	25.32	23.49	24.23	26.06
"	1862	25.34	25.16	21.87	21.67	20.05	20.91	22-50
	Means	26.91	26.69	23.19	22.54	21.34	22.10	23.80
March	1860	39°.92	40°.21	33°.29	32°.26	29°.39	31°.81	34°.48
"	1861	30.87	31.08	26.52	25.14	23.17	24.73	26.92
"	1862	33.14	32.83	28.37	26.88	24.67	26.83	28.79
	Means	34.64	34.71	29.39	28.09	25.74	27.79	30.06
April	1860	44°.89	44°.35	37°.99	37°.00	34°.73	38°.37	39°.55
"	1861	46.92	47.35	41.29	39.87	36.61	40.09	42.02
"	1862	44.09	43.79	37.77	37.14	36.02	38.55	39.56
	Means	45.30	45.16	39.02	38.00	35.79	39.00	40.38
May	1860	61°.39	61°.14	53°.42	51°.33	50°.77	55°.11	55°.53
"	1861	53.27	52.93	44.94	43.19	43.08	47.56	47.50
"	1862	58.26	58.52	49.41	47.78	47.36	51.71	52.17
	Means	57.64	57.53	49.26	47.43	47.07	51.46	51.73
June	1860	68°.65	68°.98	60°.25	58°.95	59°.17	62°.97	63°.16
"	1861	67.70	67.08	58.68	56.70	56.42	61.17	61.29
"	1862	66.57	66.15	57.33	56.45	55.44	61.20	60.52
	Means	67.64	[illegible]	58.75	57.37	57.01	61.78	61.66
July......	1860	70°.30	70°.07	60°.45	58°.94	59°.33	64°.45	63°.92
"	1861	71.49	71.58	62.41	60.76	60.56	65.40	65.37
"	1862	73.08	73.21	63.46	62.52	61.33	66.60	66.70
	Means	71.62	71.62	62.11	60.74	60.41	65.48	65.33
August ...	1860	71°.18	70°.85	61°.68	60°.24	58°.60	64°.21	64°.46
"	1861	71.75	70.91	62.67	61.45	60.48	65.59	65.48
"	1862	74.06	74.10	64.58	63.27	62.36	67.25	67.60
	Means	72.33	71.95	62.98	61.65	60.48	65.68	65.85
September.	1860	61°.53	60°.44	52°.60	51°.56	50°.17	55°.71	55°.34
"	1861	64.72	64.46	56.80	55.61	54.38	58.44	59.07
"	1862	66.26	65.73	57.01	55.40	54.34	58.77	59.59
	Means	64.17	63.54	55.48	54.19	52.96	57.64	58.00
October ..	1860	52°.06	51°.19	45°.70	45°.13	43°.74	45°.71	47°.25
"	1861	53 94	52.96	47.50	46.50	43.81	47.71	48.74
"	1862	53.79	52.23	47.94	47.15	44.53	46.60	48.70
	Means	53.26	52.13	47.05	46.26	44.03	46.67	48.23
November.	1860	41°.80	40°.80	37°.00	36°.17	35°.59	36°.32	37°.95
"	1861	40.83	39.68	36.21	35.45	35.05	35.63	37.14
"	1862	39.59	38.05	34.34	33.72	33.46	34.31	35.58
	Means	40.74	39.51	35.85	35.11	34.70	35.42	36.89
December .	1860	26°.44	25°.18	23°.02	23°.30	23°.31	22°.77	24°.00
"	1861	34.84	33.94	30.52	29.58	29.14	28.76	31.13
"	1862	31.57	30.57	28.03	27.15	27.73	27.59	28.78
	Means	30.95	29.90	27.19	26.68	26.73	26.37	27.97

TABLE II.

Monthly and Annual Means of the Temperature of the Air, furnished by six daily observations, from 1860 *to* 1862 *inclusive.*

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December	Year.
1860 1861 1862	23°.38 19.86 21.71	22°.83 26.06 22.50	34°.48 26.92 28.79	39°.55 42.02 39.56	55°.53 47.50 52.17	63°.16 61.29 60.52	63°.92 65.37 66.70	64°.46 65.48 67.60	55°.34 59.07 59.59	47°.25 48.74 48.70	37°.95 37.14 35.58	24°.00 31.13 28.78	44°.32 44.22 44.35
Mean 1860 to 1862 ..	21.65	22.80	30.06	40.38	51.73	61.66	65.33	65.85	58.00	48.23	36.89	27.97	44.30
Normal Means	24.85	23.69	30.23	41.22	51.55	61.09	66.33	65.72	57.42	44.99	36.14	27.06	44.19
Difference from Normal...... ..	-3.20	+0.11	-0.17	-0.84	+0.18	+0.57	-1.00	+0.13	+0.58	+3.24	+0.75	+0.91	+0.11
Mean 1854 to 1859 ..	22.46	20.62	29.13	40.35	51.45	61.26	68.80	65.87	58.43	46.24	36.57	24.79	43.83

TABLE III.

Monthly Means of the Temperature of the Air at each of the six observation hours, for the period 1860 *to* 1862 *inclusive.*

Toronto Astronomical Time.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Year.
2^h	24°.73	26°.91	34°.64	45°.30	57°.64	67°.64	71°.62	72°.33	64°.17	53°.26	40°.74	30°.95	49°.16
4^h	24.31	26.69	34.71	45.16	57.58	67.40	71.62	71.95	63.54	52.13	39.51	29.90	48.71
16^h	21.36	23.19	29.39	39.02	49.26	58.75	62.11	62.98	55.48	47.05	35.85	27.19	42.64
12^h	20.21	22.54	28.09	38.09	47.43	57.37	60.74	61.65	54.19	46.26	35.11	26.68	41.52
18^h	19.51	21.34	25.74	35.79	47.07	57.01	60.41	60.48	52 96	44.03	34.70	26.73	40.48
20^h	19.79	22.10	27.79	39.00	51.46	61.78	65.48	65.68	57.64	46.67	35.42	26.37	43.26

TABLE IV.

Monthly Mean Abnormal Variations of Temperature, without regard to sign, or mean differences without regard to sign between the normal temperature of the day and hour and the observed temperature of the same day and hour, for each month of the years 1860 *to* 1862.

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Year.
1860 1861 1862	9°.2 8.1 7.9	10°.4 8.9 7.0	8°.3 8.1 4.4	5°.6 4.9 6.0	6°.1 5.3 5.6	4°.0 5.2 4.8	4°.4 4.8 4.4	4°.7 4.3 4.9	6°.1 4.6 5.8	6°.0 5.7 6.7	5°.8 3.4 5.3	6°.2 10.1 8.5	6°.4 6.1 5.9
Mean 1860 to 1862 ..	8.4	8.8	6.9	5.5	5.7	4.7	4.5	4.6	5.5	6.1	4.8	8.2	6.1
Mean 1854 to 1859 ..	9.4	10.1	7.9	5.5	5.1	5.7	5.5	4.5	5.9	6.0	5.8	8.8	6.7
Mean 1854 to 1862 ..	9.1	9.7	7.6	5.5	5.3	5.4	5.2	4.5	5.8	6.0	5.5	8.6	6.5

TABLE V.

Monthly Mean Abnormal Variations of Temperature, without regard to sign, at each observation hour, for the period 1860–1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862.	1854 to 1859.
2^h	7°.6	7°.9	6°.9	6°.2	6°.4	5°.6	5°.9	4°.6	5°.7	5°.6	4°.5	7°.9	6°.2	6°.8
4	7.6	7.7	6.9	6.1	6.3	5.6	6.0	4.6	5.6	5.3	4.3	8.0	6.2	6.6
10	8.5	9.3	6.4	5.5	5.5	4.3	3.7	4.7	5.8	6.6	4.5	8.5	6.1	6.5
12	8.7	9.0	6.5	5.4	5.4	4.3	4.3	4.9	5.8	6.8	4.8	8.4	6.2	6.7
18	9.0	9.6	7.6	4.7	5.4	4.1	3.7	5.0	5.4	6.6	5.6	8.4	6.3	6.9
20	8.8	9.1	7.4	5.0	5.1	4.2	3.7	4.1	4.7	5.8	5.3	8.2	6.0	6.7

TABLE VI.

Half-yearly and Yearly Mean Abnormal Variations of Temperature, without regard to sign, for the six observation hours.

Toronto Astronomical Time.		2^h	4^h	10^h	12^h	18^h	20^h	2^h and 4^h	10^h, 12^h, 18^h, and 20^h.	All hours.
1854 to 1859	Winter	7°.6	7°.4	7°.9	8°.1	8°.6	8°.4	7°.48	8°.25	8°.00
	Summer	5.9	5.8	5.1	5.2	5.1	5.1	5.90	5.13	5.37
	Year	6.8	6.6	6.5	6.7	6.8	6.7	6.69	6.69	6.68
1860 to 1862	Winter	6.7	6.6	7.3	7.4	7.8	7.4	6.68	7.48	7.20
	Summer........	5.7	5.7	4.9	5.0	4.7	4.5	5.72	4.78	5.08
	Year	6.2	6.2	6.1	6.2	6.2	5.9	6.20	6.13	6.13
1854 to 1862	Winter	7.3	7.1	7.7	7.9	8.4	8.1	7.22	7.99	7.75
	Summer........	5.9	5.8	5.0	5.2	5.0	4.9	5.84	5.01	5.30
	Year	6.6	6.5	6.4	6.5	6.7	6.5	6.53	6.50	6.53

TABLE VII.

Probable Variability of the Monthly Means of Temperature at each of the six observation hours, in a single year, together with their half-yearly and yearly averages, from the years 1854 *to* 1862 *inclusive.*

		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.		
														Winter.	Summer	Year.
	2^h	3°.49	2°.47	2°.43	1°.94	2°.38	2°.20	2°.26	1°.66	1°.95	1°.69	1°.45	3°.12	2°.44	2°.08	2°.26
	4	3.31	2.54	2.59	1.76	2.36	2.13	2.09	1.37	1.71	1.46	1.30	3.10	2.38	1.90	2.14
	10	3.53	3.52	2.69	1.56	1.82	1.76	1.36	1.10	1.21	1.54	1.26	3.02	2.59	1.47	2.03
	12	3.67	3.85	2.76	1.52	1.76	1.88	1.33	1.14	1.07	1.56	1.30	3.04	2.70	1.45	2.07
	18	3.90	3.65	2.98	1.32	1.72	1.85	1.59	1.09	1.25	1.48	1.24	3.20	2.74	1.47	2.11
	20	3.89	3.57	2.85	1.38	1.95	1.99	1.67	1.01	1.26	1.59	1.23	3.12	2.71	1.54	2.13
Means.	2– 4	3.40	2.50	2.51	1.85	2.37	2.16	2.22	1.52	1.83	1.58	1.37	3.11	2.41	1.99	2.20
	10–20	3.75	3.65	2.82	1.45	1.81	1.87	1.49	1.08	1.20	1.54	1.26	3.10	2.69	1.48	2.08
	All hours	3.63	3.27	2.72	1.58	2.00	1.97	1.73	1.28	1.41	1.55	1.30	3.10	2.59	1.65	2.12

TABLE VIII.

Mean Abnormal Variations of Temperature, with their proper signs, arranged according to the direction of the wind at the hours of observation, for each year and for the winter and summer half years, from 1860 to 1862, the summer being considered to begin April 1st and end September 30th.

	1860.			1861.			1862.			1860 to 1862.		
	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer	Year.
N.	−4°.77	+0°.78	−1°.57	−0°.21	−1°.37	−3°.69	−5°.57	−0°.57	−3°.18	−5°.52	−0°.30	−2°.78
N. E.	+2.15	+1.49	+1.73	+1.44	−1.60	+0.08	−2.42	−0.94	−1.71	+0.19	−0.14	+0.02
E.	+6.22	−0.06	+3.01	+2.67	−0.73	+1.01	+1.28	−1.23	−0.16	+3.24	−0.75	+1.13
S. E.	+4.87	−2.48	+1.09	+3.16	−0.43	+0.98	+5.59	−0.05	+2.06	+1.43	−0.83	+1.35
S.	+5.60	+0.74	+1.58	+3.77	+0.17	+1.34	+3.08	+1.17	+1.74	+3.90	+0.73	+1.56
S. W.	+4.34	+1.89	+3.53	+5.00	+2.34	+4.07	+6.18	+3.61	+5.05	+5.11	+2.70	+4.21
W.	−0.27	−0.38	−0.31	−0.54	+0.22	−0.30	+0.57	+1.91	+1.07	−0.69	+0.56	+0.14
N. W.	−2.91	−2.34	−2.63	−3.25	−1.66	−2.42	−3.55	+0.03	−1.73	−3.22	−1.36	−2.27
Calms	−2.04	−0.96	−1.65	+0.67	−0.04	+0.16	+0.63	+0.69	+0.66	−0.23	−0.02	−0.10

TABLE IX.

Mean Abnormal Variations of Temperature, with their proper signs, arranged according to the direction of the wind at the hour of observation, in each month and in the year, for the period 1860 to 1862.

	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862	1854 to 1859
N.	−14°.07	−7°.48	−2°.00	−1°.42	+1°.01	+1°.36	−2°.35	−0°.10	−0°.96	+0°.77	−1°.61	−7°.65	−2°.78	−2°.80
N. E.	−3.73	+4.69	−3.16	[illegible]	+1.76	−0.07	−2.15	−0.69	−0.51	+2.97	+0.01	+1.03	+0.02	−1.81
E.	+2.36	+2.51	+0.37	+0.37	−0.87	−3.04	−2.60	−0.12	+0.83	+5.10	+4.04	+6.01	+1.13	+1.73
S. E.	+3.54	+0.65	+2.14	−0.26	+0.20	−3.20	−2.02	−0.55	+0.09	+6.69	+4.48	+6.79	+1.35	+1.79
S.	+4.56	+5.36	+2.19	−2.50	+1.78	+1.26	−0.79	0.00	+3.39	+4.15	+3.98	+2.31	+1.56	+2.89
S. W.	+2.49	+6.19	+3.82	+2.54	+0.91	+1.67	+2.17	+2.75	+5.27	+8.37	+1.43	+8.74	+4.21	+3.45
W.	−2.82	+0.90	+1.78	−1.83	+0.15	+1.42	+0.65	+2.60	+0.97	+1.41	−0.65	−0.85	+0.14	−2.18
N. W.	−6.49	−6.37	−3.38	−3.22	−0.85	+2.44	−1.94	−1.99	−3.41	−0.16	−0.25	−2.71	−2.27	−3.54
Calms.	−4.81	−1.13	+2.03	−1.38	−0.96	−0.67	+1.49	+0.23	−0.18	+2.05	+0.08	+0.81	−0.10	+1.33

TABLE X.

Showing, for the period 1853 to 1862, the number of times in each month in which the temperature at the hour of observation differed from the normal to the extent of 15° and upwards, with the average value of the corresponding deviation.

		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Relatively high temperatures.	Number	47	83	55	15	21	35	21	12	30	53	37	46
	Ratio to mean	1.24	2.19	1.45	0.40	0.55	0.92	0.55	0.32	0.79	1.40	0.98	1.21
	Average excess......	17°.5	18°.3	17°.6	16°.9	17°.9	16°.5	16°.5	17°.4	16°.9	17°.7	17°.1	18°.8
Relatively low temperatures.	Number	240	227	134	24	26	15	9	5	16	8	28	178
	Ratio to mean	3.16	2.99	1.77	0.32	0.34	0.20	0.12	0.07	0.21	0.11	0.37	2.35
	Average defect	22°.9	21°.5	20°.4	17°.3	17°.7	18°.0	15°.5	16°.6	16°.6	16°.3	18°.8	20°.9

TABLE XI.

Relative frequency of the several Winds during extraordinarily high temperatures, when the temperature at the hour of observation exceeded the normal by 15° and upwards, with the average excess of temperature for each wind, deduced from observations in the ten years 1853 to 1862.

	Absolute number of each wind during high temperatures.				Duration of each wind without regard to temperature in terms of the average duration of all winds, from Table LXVI.				Relative frequency of each wind during high temperatures, or ratios of (1) to (2).				Ratios of the numbers in the four preceding columns to their respective means for all winds.				Average excess for each wind.			
	(1)				(2)				(3)				(4)				(5)			
	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.
N.	5	0	2	5	1.18	1.03	1.01	1.07	4.2	0.0	2.0	4.7	0.30	0.00	0.50	0.66	17°.7	° ...	16°.5	16°.8
N.N.E.	3	2	2	3	0.88	0.63	0.67	0.77	3.4	3.2	3.0	3.9	0.24	0.59	0.76	0.55	16.4	20.3	15.3	15.5
N.E.	8	0	0	5	0.87	0.76	0.62	0.77	9.2	0.0	0.0	6.5	0.65	0.00	0.00	0.91	18.3	...	...	17.5
E.N.E.	16	8	1	7	0.75	1.45	0.98	1.02	21.3	5.5	1.0	6.8	1.50	1.03	0.26	0.96	16.5	17.5	15.3	18.4
E.	16	3	0	18	0.85	1.73	1.34	1.13	18.9	1.7	0.0	15.9	1.33	0.32	0.00	2.24	17.1	16.8	...	17.0
E.S.E.	7	0	1	2	0.40	0.75	0.78	0.56	17.3	0.0	1.3	3.6	1.22	0.00	0.33	0.50	19.0	...	16.8	16.2
S.E.	4	1	1	6	0.23	0.47	0.58	0.42	17.6	2.1	1.7	14.3	1.24	0.40	0.44	2.02	17.5	19.1	16.5	15.9
S.S.E.	8	3	2	1	0.24	0.42	0.72	0.48	33.9	7.2	2.8	2.1	2.38	1.34	0.70	0.29	18.8	20.4	16.1	15.6
S.	9	3	11	5	0.24	0.66	1.29	0.74	37.5	4.6	8.5	6.7	2.64	0.85	2.16	0.95	21.2	18.8	16.6	17.2
S.S.W.	16	12	13	17	0.71	1.01	1.53	1.14	22.5	11.9	8.5	14.9	1.58	2.22	2.16	2.11	18.3	16.3	16.1	17.8
S.W.	37	10	7	18	1.46	0.88	0.97	1.15	25.3	11.3	7.2	15.7	1.78	2.11	1.83	2.21	18.6	16.7	16.2	18.7
W.S.W.	19	8	5	8	2.29	0.79	0.57	1.23	8.3	10.1	8.8	6.5	0.58	1.89	2.23	0.92	18.7	17.4	16.6	17.1
W	8	12	9	6	1.97	1.13	0.79	1.26	4.1	10.6	11.4	4.7	0.29	1.98	2.89	0.67	18.6	19.0	18.3	16.5
W.N.W.	3	11	2	5	1.31	1.45	1.06	1.37	2.3	7.6	1.9	3.7	0.16	1.41	0.48	0.52	18.4	17.1	16.5	18.4
N.W.	5	10	6	1	1.23	1.54	1.41	1.21	4.1	6.5	4.3	0.8	0.29	1.21	1.08	0.12	18.4	17.6	17.2	16.1
N.N.W.	0	2	3	6	1.40	1.51	1.57	1.25	0.0	1.3	1.9	4.8	0.00	0.25	0.48	0.68	...	16.3	17.2	17.1
Calms.	12	6	3	7	0.99	0.79	1.11	1.43	12.1	7.6	2.7	4.9	0.85	1.41	0.69	0.69	17.2	17.3	16.3	15.5

TABLE XII.

Relative frequency of the several Winds during extraordinarily low temperatures, when the temperature at the hour of observation was below the normal by 15° and upwards, with the average defect of temperature for each wind, deduced from observations in the ten years 1853 to 1862.

	Absolute number of each wind during low temperatures. (1)				Duration of each wind without regard to temperature, in terms of the average duration of all winds, from Table LXVI. (2)				Relative frequency of each wind during low temperatures, or ratios of (1) to (2). (3)				Ratios of the numbers in the four preceding columns to their respective means for all winds. (4)				Average defect for each wind. (5)			
	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.
N.	116	9	1	12	1.18	1.03	1.01	1.07	98.0	8.8	1.0	11.2	3.25	0.99	0.61	3.94	23°.5	20°.6	15°.3	17°.6
N.N.E.	56	10	1	5	0.88	0.63	0.67	0.77	63.8	15.9	1.5	6.5	2.12	1.79	0.92	2.30	23.5	21.1	15.2	15.8
N.E.	42	5	3	0	0.87	0.76	0.62	0.77	48.3	6.6	4.8	0.0	1.61	0.74	2.99	0.00	20.9	17.0	16.6	...
E.N.E.	3	8	3	2	0.75	1.45	0.98	1.02	4.0	5.5	3.1	2.0	0.13	0.62	1.90	0.69	17.6	18.4	17.2	15.6
E.	2	5	3	3	0.85	1.73	1.34	1.13	2.4	2.9	2.2	2.6	0.08	0.32	1.40	0.93	33.6	18.8	15.6	16.9
E.S.E.	0	0	0	2	0.40	0.75	0.78	0.56	0.0	0.0	0.0	3.6	0.00	0.00	0.00	1.26	...	...	...	17.5
S.E.	2	0	0	0	0.23	0.47	0.58	0.42	8.8	0.0	0.0	0.0	0.29	0.00	0.00	0.00	18.3	...	...	...
S.S.E.	0	0	0	0	0.24	0.42	0.72	0.48	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	...	...	...	...
S.	0	0	2	0	0.24	0.66	1.29	0.74	0.0	0.0	1.5	0.0	0.00	0.00	0.96	0.00	...	...	18.0	...
S.S.W.	0	3	0	1	0.71	1.01	1.53	1.14	0.0	3.0	0.0	0.9	0.00	0.33	0.00	0.31	...	20.3	...	15.5
S.W.	13	0	0	0	1.46	0.88	0.97	1.15	8.9	0.0	0.0	0.0	0.29	0.00	0.00	0.00	17.9	...	...	...
W.S.W.	60	8	1	12	2.29	0.79	0.57	1.23	26.2	10.1	1.7	9.8	0.87	1.14	1.09	3.43	20.7	18.2	16.4	16.6
W.	84	13	1	0	1.97	1.13	0.79	1.26	42.7	11.5	1.3	0.0	1.42	1.29	0.79	0.00	21.3	20.4	16.0	...
W.N.W.	59	38	2	5	1.31	1.45	1.06	1.37	45.0	20.2	1.9	3.7	1.49	2.95	1.17	1.29	20.5	19.6	16.7	19.7
N.W.	62	42	6	5	1.23	1.54	1.41	1.21	50.3	27.3	4.3	4.1	1.67	3.07	2.64	1.45	21.8	19.5	18.6	23.4
N.N.W.	112	35	5	5	1.40	1.51	1.58	1.25	80.2	23.1	3.2	4.0	2.66	2.60	1.97	1.41	22.5	20.0	16.7	16.9
Calms	33	8	1	0	0.99	0.79	1.11	1.43	33.3	10.1	0.9	0.0	1.10	1.14	0.56	0.00	20.0	17.8	16.8	...

TABLE XIII.

Mean differences without regard to sign between the temperatures of the air at 6 a. m. on consecutive days, for each month in the years 1860 to 1862, the effect of annual variation being eliminated.

		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	1860	8°.4	9°.6	5°.3	5°.2	4°.0	3°.9	4°.2	4°.3	6°.3	5°.1	5°.8	6°.4	5°.7
	1861	8.1	9.0	9.3	3.9	3.7	4.8	3.9	3.8	6.5	5.5	4.9	7.6	5.9
	1862	9.4	10.2	4.7	4.1	6.3	4.7	4.1	5.4	6.4	8.2	5.9	8.9	6.5
Means	1860 to 1862	8.6	9.6	6.4	4.4	4.7	4.5	4.1	4.5	6.4	6.3	5.5	7.6	6.1
	1854 to 1859	10.0	10.0	6.7	4.9	4.2	3.9	3.7	4.2	6.2	6.8	7.2	8.3	6.3

TABLE XIV.

Mean change of temperature with its proper sign, from 6 a.m. to 6 a.m., for the period 1860 to 1862, arranged according to the daily resultant direction of the wind, the effect of annual variation being eliminated.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862	1854 to 1859
N.	− 3°.0	− 2°.2	−3°.4	−2°.3	−0°.1	−2°.0	−2°.3	−2°.0	−3°.7	− 2°.0	− 0°.8	+ 1°.4	−1°.9	−3°.3
N.E.	+ 6.8	+ 4.1	+2.7	+3.0	+0.4	+0.3	+0.6	−1.2	+0.7	+ 1.3	+ 2.3	+ 4.8	+2.4	+1.5
E.	+10.6	+12.9	+5.1	+2.2	+1.1	−0.3	+1.9	+1.7	+7.3	+ 4.8	+ 1.4	+ 8.1	+4.0	+3.5
S.E.	*	+ 5.1	−4.8	+5.5	+3.0	+6.8	+2.2	+8.1	+9.9	+ 3.2	+11.6	+10.9	+6.3	+4.6
S.	− 3.8	+ 7.8	+8.4	+5.8	+1.4	+4.7	+2.7	+1.1	+6.1	+14.1	+ 6.0	+ 0.6	+3.9	+3.9
S.W.	+ 5.3	+ 3.4	+5.7	+2.5	+3.5	+4.0	+2.5	+1.8	−0.2	+ 1.3	− 0.3	+ 5.2	+2.7	+2.2
W.	− 3.5	− 2.7	−2.2	−4.4	−2.6	−2.2	−3.2	−2.3	−3.5	− 3.7	− 2.5	− 5.0	−3.2	−2.9
N.W.	−12.4	− 7.4	−4.5	−4.2	−2.6	−2.1	−2.3	−4.3	−6.6	− 5.1	− 3.5	− 4.3	−4.5	−4.5

* No case of a S.E. resultant occurred in January.

TABLE XV.

Highest and lowest temperatures in each month, for the years 1860, 1861, and 1862.

MAXIMA.

		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
														Tempert.	Date.
	1860	46°.4	50°.2	67°.0	61°.8	74°.5	81°.6	88°.0	87°.0	75°.8	68°.0	64°.5	39°.0	88°.0	July 19.
	1861	37.0	46.0	47.4	67.0	73.0	87.8	84.5	85.2	78.8	71.0	52.4	55.2	87.8	June 9.
	1862	44.5	37.8	43.2	68.0	78.5	85.4	95.5	89.5	79.4	76.6	58.0	50.1	95.5	July 6.
Means	1860 to 1862	42.6	44.7	52.5	65.6	75.3	84.9	89.3	87.2	78.0	71.9	58.3	48.1	90.4	
	1854 to 1859	42.9	43.4	52.2	64.7	75.9	87.6	91.2	86.6	82.2	70.8	57.5	46.7	92.5	

MINIMA.

		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Tempert.	Date.
	1860	−6°.8	−8°.5	12°.8	19°.5	32°.5	49°.2	43°.8	46°.8	28°.7	28°.4	13°.2	−7°.0	−8°.5	Feb. 1.
	1861	−11.2	−20.8	− 5.2	23.8	28.0	41.6	47.0	47.0	37.1	29.0	23.0	5.5	−20.8	Feb. 8.
	1862	−2.6	− 5.2	8.0	14.5	32.4	39.4	48.2	42.8	39.0	26.2	16.2	3.4	−5.2	Feb. 15.
Means	1860 to 1862	−6.9	11.5	5.2	19.3	31.0	43.4	46.3	45.5	34.9	27.9	17.5	−1.6	−11.5	
	1854 to 1859	−10.5	11.0	−1.8	15.9	31.0	37.2	47.5	43.8	34.9	25.4	13.6	−3.1	18.1	

TABLE XVI.

Monthly Means of the Barometric Pressure, at each of the six observation hours, from 1860 to 1862 inclusive.

Barometer at 32° = 27 inches + the numbers in the table.

Toronto Astronomical Time.		2h	4h	10h	12h	18h	20h	Means.
January ..	1860	2.621	2.624	2.646	2.641	2.654	2.672	2.643
"	1861	2.630	2.640	2.663	2.661	2.652	2.664	2.652
"	1862	2.699	2.713	2.746	2.746	2.724	2.738	2.727
	Means	2.650	2.659	2.685	2.683	2.677	2.691	2.674
February.	1860	2.604	2.608	2.651	2.653	2.638	2.646	2.632
"	1861	2.556	2.523	2.532	2.538	2.566	2.576	2.544
"	1862	2.592	2.599	2.607	2.599	2.620	2.629	2.608
	Means	2.575	2.575	2.597	2.597	2.608	2.617	2.595
March	1860	2.488	2.488	2.528	2.519	2.516	2.527	2.511
"	1861	2.603	2.596	2.622	2.616	2.636	2.652	2.621
"	1862	2.485	2.485	2.522	2.517	2.500	2.512	2.504
	Means	2.525	2.523	2.557	2.551	2.551	2.564	2.545
April	1860	2.563	2.552	2.578	2.581	2.589	2.602	2.578
"	1861	2.553	2.537	2.554	2.552	2.590	2.598	2.564
"	1862	[illegible]	[illegible]	2.729	2.729	2.729	2.743	2.726
	Means	2.611	2.599	[illegible]	2.621	2.636	2.648	2.623
May	1860	2.559	2.545	2.561	2.561	2.580	2.589	2.566
"	1861	2.539	2.534	2.558	2.555	2.534	2.553	2.545
"	1862	2.581	2.564	2.585	2.584	2.604	2.619	2.590
	Means	2.560	2.548	2.568	2.567	2.573	2.587	2.567
	1860	2.487	2.477	2.505	2.504	2.502	2.513	2.498
"	1861	[illegible]	2.550	2.562	[illegible]	2.587	2.594	2.570
"	1862	2.556	2.541	2.556	2.556	2.583	2.594	2.564
	Means	2.536	2.523	2.541	2.540	2.557	2.567	2.544

Toronto Astronomical Time.		2h	4h	10h	12h	18h	20h	Means
July......	1860	2.556	2.550	2.574	2.576	2.557	2.571	2.564
"	1861	2.535	2.529	2.559	2.558	2.554	2.567	2.551
"	1862	2.540	2.527	2.549	2.553	2.552	2.563	2.547
	Means	2.544	2.535	2.561	2.562	2.554	2.567	2.554
August ...	1860	2.571	2.560	2.580	2.580	2.596	2.607	2.582
"	1861	2.644	2.634	2.657	[illegible]	2.655	2.669	2.653
"	1862	2.606	2.591	2.617	[illegible]	2.629	2.685	2.616
	Means	2.607	2.595	2.618	[illegible]	2.627	2.687	2.617
September.	1860	2.651	2.646	2.692	2.694	2.674	2.683	2.673
"	1861	2.597	2.587	2.611	2.610	2.618	2.628	2.608
"	1862	[illegible]	2.666	2.690	2.693	2.681	2.695	2.683
	Means	[illegible]	2.633	2.664	2.666	2.658	2.669	2.655
October ..	1860	2.652	2.656	2.692	2.688	2.659	2.680	2.671
"	1861	2.604	2.602	2.607	2.604	2.646	2.653	2.619
"	1862	2.592	2.594	2.621	2.626	2.633	2.646	2.619
	Means	2.616	2.617	2.640	2.639	2.646	2.660	2.636
November.	1860	2.507	2.515	2.525	2.545	2.531	2.543	2.528
"	1861	2.525	2.533	2.544	2.536	2.535	2.549	2.537
"	1862	2.612	2.621	2.653	2.654	2.632	2.647	2.636
	Means	2.548	2.556	2.574	2.568	2.566	2.580	2.565
December .	1860	2.658	2.671	2.677	2.674	2.653	2.666	2.667
"	1861	2.727	2.738	2.745	2.744	2.753	2.769	2.746
"	1862	2.662	2.670	2.690	2.685	2.671	2.689	2.678
	Means	2.682	2.693	2.704	2.701	2.692	2.708	2.697

TABLE XVII.

Monthly and annual means of the Barometric Pressure furnished by six daily observations, from 1860 *to* 1862.

Barometer at temperature 32° = 27 inches + the numbers in the table.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	2.643	2.632	2.511	2.578	2.566	2.498	2.564	2.582	2.673	2.671	2.523	2.667	2.592
1861	2.652	2.544	2.621	2.564	2.545	2.570	2.551	2.65[illegible]	2.608	2.619	2.537	2.746	2.601
1862	2.727	2.608	2.504	2.726	2.590	2.564	2.547	2.616	2.68[illegible]	2.619	2.636	2.678	2.625
Means 1860 to 1862	2.674	2.595	2.545	2.623	2.567	2.544	2.554	2.617	2.655	2.636	2.565	2.697	2.606
Means 1854 to 1859	2.667	2.639	2.538	2.572	2.596	2.544	2.614	2.606	2.675	2.653	2.595	2.670	2.614

TABLE XVIII.

Monthly means of the Barometric Pressure at each of the six observation hours, for the period 1860 *to* 1862.

Barometer at temperature 32° = 27 inches + the numbers in the table.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2h	2.650	2.575	2.525	2.611	2.560	2.536	2.544	2.607	2.640	2.616	2.548	2.682	2.591
4	2.659	2.575	2.523	2.599	2.548	2.523	2.535	2.595	2.633	2.617	2.556	2.693	2.588
10	2.685	2.597	2.557	2.620	2.568	2.541	2.561	2.618	2.664	2.640	2.574	2.704	2.611
12	2.683	2.597	2.551	2.621	2.567	2.540	2.562	2.620	2.666	2.639	2.568	2.701	2.610
18	2.677	2.608	2.551	2.636	2.573	2.557	2.554	2.627	2.658	2.646	2.566	2.692	2.610
20	2.691	2.617	2.564	2.648	2.587	2.567	2.567	2.637	2.669	2.660	2.580	2.708	2.625

TABLE XIX.

Monthly mean abnormal variations of the Barometer without regard to sign, for each month of the years 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.207	0.238	0.215	0.207	0.139	0.185	0.124	0.122	0.143	0.167	0.231	0.334	0.193
1861	.206	.262	.222	.194	.214	.118	.109	.103	.163	.197	.195	.227	0.184
1862	.229	.191	.192	.226	.112	.139	.135	.118	.125	.153	.204	.212	0.170
Means 1860 to 1862	0.214	0.230	0.210	0.209	[illegible]	0.147	0.123	0.114	0.144	0.172	0.210	0.257	0.182
Means 1854 to 1859	0.249	0.215	0.223	0.196	0.151	[illegible]	0.121	0.119	0.162	0.183	0.228	0.225	0.183
Means 1854 to 1862	0.237	0.220	0.219	0.200	0.152	0.133	0.122	0.117	0.156	0.179	0.222	0.236	0.183

TABLE XX.

Monthly Mean Abnormal Variations of the Barometer, without regard to sign, at each of the six observation hours, for the period 1860 to 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862.	1854 to 1859
2h	0.220	0.228	0.215	0.210	0.155	0.149	0.125	0.113	0.146	0.177	0.207	0.265	0.184	0.187
4	.217	.224	.210	.211	.153	.143	.117	.110	.140	.173	.201	.260	.180	.182
10	.210	.223	.206	.210	.152	.185	.110	.112	.134	.170	.206	.265	.178	.175
12	.205	.225	.207	.212	.154	.188	.112	.115	.137	.172	.212	.260	.179	.177
18	.215	.240	.206	.205	.159	.160	.135	.118	.151	.168	.217	.245	.185	.188
20	.218	.241	.213	.205	.159	.159	.137	.117	.155	.173	.218	.248	.187	.191

TABLE XXI.

Probable Variability of the Monthly Means of the Barometer at each hour, in a single year, derived from observations in the nine years, 1854 to 1862.

Toronto Astronomical Time.	January.	February	March.	April.	May.	June.	July.	August.	September	October.	November	December	Year.
2h	.0267	.0550	.0453	.0492	.0304	.0393	.0245	.0294	.0300	.0343	.0540	.0330	.0376
4	.0251	.0521	.0452	.0487	.0287	.0388	.0229	.0280	.0280	.0330	.0533	.0325	.0364
10	.0274	.0474	.0455	.0471	.0246	.0391	.0214	.0278	.0271	.0356	.0539	.0296	.0355
12	.0289	.0456	.0455	.0480	.0254	.0388	.0214	.0279	.0278	.0372	.0553	.0299	.0360
18	.0337	.0514	.0453	.0490	.0336	.0408	.0307	.0296	.0316	.0315	.0591	.0374	.0395
20	.0325	.0531	.0461	.0499	.0335	.0420	.0283	.0294	.0315	.0323	.0568	.0389	.0395
Means	.0291	.0508	.0455	.0486	.0294	.0398	.0249	.0287	.0293	.0340	.0554	.0335	.0374

TABLE XXII.

Mean Abnormal Variations of the Barometer, with their proper signs, arranged according to the direction of the wind, for each year and for the winter and summer half years, from 1860 to 1862, the summer being considered to begin April 1st, and end September 30th.

	1860.			1861.			1862.			Means 1860-1862.		
	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.
N.	+0.155	+0.008	+0.062	+0.063	+0.024	+0.048	+0.136	+0.066	+0.103	+0.114	+0.032	+0.071
N E.	+ .034	— .041	— .018	— .006	— .031	— .016	+ .075	+ .098	+ .086	+ .085	+ .006	+ .020
E.	+ .029	— .012	+ .008	— .012	+ .004	+ .001	+ .034	+ .041	+ .038	+ .019	+ .015	+ .017
S E.	+ .030	+ .055	+ .048	+ .042	+ .027	+ .033	— .057	+ .090	+ .085	+ .010	+ .055	+ .087
S.	— .055	+ .026	+ .012	— .029	+ .035	+ .014	— .033	+ .018	+ .003	— .037	+ .026	+ .009
S W.	— .171	— .158	— .167	— .063	— .092	— .073	— .128	— .075	— .105	— .119	— .104	— .114
W.	— .069	— .134	— .093	— .037	— .175	— .082	— .056	— .042	— .051	— .055	— .115	— .076
N.W.	— .009	— .017	— .018	+ .031	— .049	— .011	+ .027	— .010	+ .009	+ .014	— .024	— .005
Calms.	+ .042	+ .018	+ .033	— .015	+ .030	+ .018	+ .062	+ .049	+ .056	+ .027	+ .032	+ .030

TABLE XXIII.

Mean Abnormal Variations of the Barometer, with their proper signs, arranged according to the direction of the wind, in each month and in the year, for the period 1860–1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862.	1853 to 1859.
N.	+0.152	+0.105	+0.018	+0.031	+0.054	+0.021	−0.021	+0.048	+0.045	+0.132	+0.021	+0.214	+0.071	+0.069
N.E.	+ .031	− .109	+ .024	+ .010	− .006	− .002	− .056	− .003	+ .090	+ .099	+ .060	+ .110	+ .020	+ .052
E.	+ .030	− .320	− .018	+ .044	− .031	+ .029	− .030	+ .015	+ .042	+ .003	+ .104	+ .070	+ .017	+ .016
S.E.	− .148	− .064	+ .010	+ .168	+ .047	+ .084	− .045	− .034	+ .085	+ .009	+ .067	+ .140	+ .037	+ .041
S.	− .126	− .197	+ .135	− .023	+ .079	+ .042	+ .001	+ .019	+ .027	+ .034	− .151	+ .130	+ .009	+ .016
S.W.	− .048	− .114	− .307	− .118	− .042	− .120	− .111	− .082	− .129	− .168	− .203	− .028	− .114	− .115
W.	+ .076	+ .087	− .144	− .066	− .181	− .134	− .114	− .100	− .089	− .166	− .007	− .044	+ .076	− .061
N.W.	+ .068	+ .027	− .028	+ .029	− .018	− .067	− .040	− .025	− .005	+ .002	− .055	+ .066	− .005	− .017
Calms	+ .073	+ .146	+ .012	+ .041	+ .041	+ .021	− .017	+ .051	+ .059	− .020	− .109	+ .138	+ .080	+ .030

TABLE XXIV.

Mean Differences without regard to sign between the barometric pressures at 6 *a.m. on consecutive days, for each month in the years* 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.255	0.248	0.174	0.223	0.123	0.135	0.188	0.114	0.164	0.144	0.258	0.247	0.189
1861	.254	.330	.330	.161	.220	.147	.106	.081	.175	.221	.315	.265	.208
1862	.337	.289	.200	.201	.136	.162	.142	.166	.150	.211	.188	.235	.201
Means 1860 to 1862	0.282	0.289	0.235	0.195	0.160	0.148	0.144	0.120	0.163	0.192	0.220	0.249	0.199
Means 1854 to 1859	0.280	0.253	0.257	0.217	0.160	0.126	0.110	0.128	0.151	0.168	0.248	0.273	0.198
Means 1854 to 1862	0.281	0.265	0.250	0.210	0.160	0.133	0.121	0.125	0.155	0.176	0.239	0.265	0.198

TABLE XXV.

Mean change in the Barometer with its proper sign, from 6 *a.m. to* 6 *a.m., for the period* 1860 *to* 1862, *arranged according to the daily resultant direction of the wind.*

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862.	1854 to 1859.
N.	+0.107	+0.093	+0.194	+0.105	−0.116	+0.127	+0.106	−0.031	+0.092	−0.006	+0.086	+0.067	+0.076	+0.097
N.E.	− .237	− .347	− .179	− .126	− .074	+ .063	− .081	+ .016	− .055	− .090	− .172	− .233	− .137	− .103
E.	− .548	− .332	− .267	− .151	− .123	− .135	− .007	− .071	− .237	− .197	− .254	− .246	− .196	− .179
S.E.	*	− .205	− .313	− .118	− .091	− .282	− .072	− .199	− .119	+ .042	− .405	− .206	− .178	− .197
S.	+ .074	− .362	− .443	− .113	− .017	− .159	− .089	− .079	− .097	− .314	− .381	− .170	− .130	− .099
S.W.	− .094	− .106	− .120	+ .018	− .067	− .148	− .099	− .092	− .021	− .035	− .066	− .201	− .089	− .036
W.	+ .192	+ .170	+ .112	+ .213	+ .156	+ .059	+ .101	+ .048	+ .189	+ .119	+ .228	+ .134	+ .142	+ .144
N.W.	+ .234	+ .330	+ .183	+ .148	+ .154	+ .139	+ .133	+ .192	+ .156	+ .248	+ .104	+ .233	+ .183	+ .170

* No case of a S E resultant occurred in January.

TABLE XXVI.

Highest and lowest Readings of the Barometer in each month, for the years 1860, 1861, *and* 1862.

Barometer at 32° = 27 inches + the numbers in the Table.

HIGHEST.

Year.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													Barometer.	Date.
1860	3.142	3.136	2.934	3.265	2.886	2.859	2.839	2.903	3.170	2.952	2.959	3.267	3.267	December 14.
1861	3.330	3.144	3.200	3.120	2.955	2.810	2.830	2.902	3.104	3.054	3.000	3.182	3.330	January 22.
1862	3.300	3.138	2.828	3.117	2.942	3.109	2.957	2.977	3.031	3.039	3.469	3.453	3.469	November 15.
Means.........	3.257	3.139	2.987	3.167	2.928	2.926	2.875	2.927	3.102	3.025	3.143	3.301	3.355	

LOWEST.

1860	2.155	1.920	2.044	1.896	2.088	1.909	2.157	2.211	2.233	2.019	1.844	1.839	1.839	December 20.
1861	2.006	1.979	2.034	2.055	1.644	2.176	2.269	2.392	2.076	1.998	2.005	2.171	1.644	May 6.
1862	1.965	2.011	1.805	2.076	2.238	2.163	2.196	2.326	2.107	2.047	2.132	2.105	1.805	March 3.
Means.........	2.042	1.970	1.961	2.009	1.990	2.083	2.207	2.306	2.139	2.021	1.994	2.038	1.762	

TABLE XXVII.

Montly means of the Pressure of Dry Air, at each of the six observation hours, from 1860 to 1862 inclusive.

Pressure of Dry Air at 32° = 27 inches + the numbers in the table.

Toronto Astronomical Time.		2h	4h	10h	12h	18h	20h	Means.	Toronto Astronomical Time.		2h	4h	10h	12h	18h	20h	Means.
January ..	1860	2.506	2.510	2.532	2.532	2.548	2.569	2.533	July.........	1860	2.114	2.130	2.155	2.167	2.137	2.117	2.137
"	1861	2.521	2.531	2.561	2.562	2.554	2.567	2.549	"	1861	2.025	2.027	2.110	2.120	2.123	2.098	2.081
"	1862	2.588	2.604	2.645	2.647	2.624	2.637	2.624	"	1862	2.039	2.037	2.098	2.101	2.098	2.076	2.075
	Means	2.538	2.548	2.579	2.580	2.575	2.591	2.569		Means	2.059	2.065	2.121	2.129	2.119	2.097	2.099
February .	1860	2.488	2.484	2.541	2.544	2.528	2.536	2.520	August......	1860	2.069	2.075	2.130	2.140	2.165	2.137	2.119
"	1861	2.394	2.388	2.398	2.406	2.444	2.453	2.414	"	1861	2.092	2.095	2.185	2.200	2.205	2.169	2.158
"	1862	2.483	2.489	2.501	2.492	2.515	2.525	2.501	"	1862	2.054	2.043	2.135	2.135	2.149	2.121	2.106
	Means	2.455	2.454	2.480	2.481	2.496	2.505	2.478		Means	2.072	2.071	2.150	2.158	2.173	2.142	2.128
March	1860	2.320	2.326	2.384	2.382	2.380	2.385	2.363	September..	1860	2.281	2.291	2.356	2.367	2.362	2.333	2.332
"	1861	2.472	2.465	2.492	2.490	2.513	2.528	2.493	"	1861	2.162	2.156	2.232	2.234	2.242	2.226	2.209
"	1862	2.343	2.346	2.387	2.389	2.381	2.386	2.372	"	1862	2.217	2.218	2.286	2.304	2.291	2.272	2.265
	Means	2.378	2.379	2.421	2.420	2.425	2.433	2.409		Means	2.220	2.222	2.291	2.302	2.298	2.277	2.269
April	1860	2.365	2.359	2.388	2.399	2.419	2.427	2.393	October ...	1860	2.366	2.371	2.422	2.425	2.398	2.415	2.399
"	1861	2.337	2.332	2.350	2.351	2.411	2.410	2.365	"	1861	2.292	2.300	2.309	2.314	2.381	2.365	2.327
"	1862	2.519	2.518	2.551	2.550	2.552	2.560	2.542	"	1862	2.264	2.276	2.319	2.330	2.358	2.365	2.319
	Means	2.407	2.403	2.430	2.433	2.461	2.466	2.433		Means	2.307	2.316	2.350	2.356	2.379	2.382	2.349
May	1860	2.187	2.180	2.230	2.247	2.265	2.258	2.228	November..	1860	2.301	2.313	2.332	2.328	2.339	2.349	2.327
"	1861	2.296	2.292	2.333	2.334	2.312	2.313	2.313	"	1861	2.346	2.354	2.369	2.363	2.352	2.368	2.359
"	1862	2.302	2.303	2.338	2.346	2.366	2.366	2.337	"	1862	2.429	2.446	2.484	2.486	2.464	2.481	2.465
	Means	2.262	2.258	2.300	2.309	2.314	2.312	2.293		Means	2.359	2.371	2.395	2.392	2.385	2.399	2.384
June ...	1860	2.053	2.036	2.109	2.120	2.103	2.085	2.084	December...	1860	2.540	2.556	2.563	2.559	2.537	2.553	2.551
"	1861	2.157	2.162	2.192	2.205	2.234	2.206	2.192	"	1861	2.570	2.579	2.589	2.596	2.605	2.629	2.595
"	1862	2.178	2.164	2.227	2.235	2.263	2.245	2.219	"	1862	2.513	2.524	2.550	2.547	2.528	2.554	2.536
	Means	2.129	2.121	2.176	2.187	2.200	2.179	2.165		Means	2.541	2.553	2.567	2.567	2.557	2.579	2.560

TABLE XXVIII.

Monthly and annual means of the Pressure of Dry Air, furnished by six daily observations, from 1860 *to* 1862.

Pressure of Dry Air at 32° — 27 inches + the numbers in the table.

	Jan.	Feb.	March.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	2.533	2.520	2.363	2.393	2.228	2.084	2.137	2.119	2.532	2.399	2.327	2.551	2.334
1861	2.549	2.414	2.493	2.365	2.313	2.192	2.084	2.158	2.209	2.327	2.359	2.595	2.338
1862	2.624	2.501	2.372	2.542	2.337	2.219	2.075	2.106	2.265	2.319	2.465	2.536	2.363
Means 1860 to 1862	2.569	2.478	2.409	2.433	2.293	2.165	2.099	2.128	2.269	2.349	2.384	2.560	2.345
Means 1854 to 1859	2.556	2.536	2.405	2.388	2.331	2.137	2.107	2.148	2.292	2.406	2.419	2.551	2.356

TABLE XXIX.

Monthly means of the Pressure of Dry Air at each of the six observation hours, for the period 1860 *to* 1862.

Pressure of Dry Air at 32° = 27 inches + the numbers in the table.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2h	2.538	2.455	2.378	2.407	2.262	2.129	2.059	2.072	2.220	2.307	2.359	2.541	2.311
4	2.548	2.454	2.379	2.403	2.258	2.121	2.065	2.071	2.222	2.316	2.371	2.553	2.313
10	2.579	2.480	2.421	2.430	2.300	2.176	2.121	2.150	2.291	2.350	2.395	2.567	2.355
12	2.580	2.481	2.420	2.433	2.309	2.187	2.129	2.158	2.302	2.356	2.392	2.567	2.359
18	2.575	2.496	2.425	2.461	2.314	2.200	2.119	2.173	2.298	2.379	2.385	2.557	2.365
20	2.591	2.505	2.433	2.466	2.312	2.179	2.097	2.142	2.277	2.382	2.399	2.579	2.364

TABLE XXX.

Monthly mean abnormal variations of the Pressure of Dry Air without regard to sign, for each month of the years 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.238	0.258	0.224	0.229	0.178	0.207	0.182	0.183	0.201	0.194	0.235	0.351	0.223
1861	.226	.283	.257	.227	.251	.180	.164	.174	.210	.235	.200	.259	.222
1862	.256	.211	.205	.231	.129	.192	.155	.215	.193	.216	.218	.237	.205
Means 1860 to 1862	0.240	0.251	0.229	0.229	0.186	0.193	0.167	0.191	0.201	0.215	0.218	0.282	0.217

TABLE XXXI.

Monthly Mean Abnormal Variations of the Pressure of Dry Air, without regard to sign, at each of the six observation hours, for the period 1860 to 1862.

Toronto Astronomical Time.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Year.
2h	0.246	0.240	0.236	0.228	0.194	0.203	0.164	0.194	0.205	0.222	0.212	0.291	0.220
4	.242	.240	.232	.241	.193	.196	.161	.192	.200	.214	.207	.289	.217
10	.232	.245	.220	.232	.186	.173	.155	.194	.191	.214	.214	.294	.213
12	.229	.250	.221	.230	.187	.177	.160	.196	.190	.218	.217	.287	.213
18	.244	.267	.230	.221	.182	.204	.186	.186	.210	.212	.227	.264	.219
20	.247	.268	.232	.221	.175	.208	.179	.188	.212	.212	.229	.269	.219

TABLE XXXII.

Mean Abnormal Variations of the Pressure of Dry Air, with their proper signs, arranged according to the direction of the wind, for each year and for the winter and summer half years, from 1860 to 1862, the summer being considered to begin April 1st, and end September 30th.

	1860.			1861.			1862.			Mean 1860-1862.		
	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.
N.	+0.157	+0.028	+0.083	+0.084	+0.064	+0.073	+0.161	+0.118	+0.141	+0.136	+0.068	+0.101
N. E.	+ .009	− .068	− .035	− .029	− .020	− .025	+ .089	+ .128	+ .108	+ .025	+ .008	+ .016
E.	− .018	− .004	− .011	− .028	+ .012	− .008	+ .009	+ .044	+ .029	− .012	+ .021	+ .005
S. E.	− .017	+ .086	+ .036	+ .017	+ .029	+ .024	− .103	+ .089	+ .017	− .028	+ .064	+ .026
S.	− .080	+ .021	+ .004	− .046	+ .025	+ .002	− .047	+ .001	− .014	− .054	+ .015	− .003
S. W.	− .182	− .186	− .183	− .094	− .131	− .107	− .181	− .143	− .164	− .149	− .152	− .150
W.	− .053	− .107	− .072	− .025	− .165	− .071	− .049	− .038	− .045	− .043	− .100	− .063
N. W.	+ .025	+ .055	+ .040	+ .059	− .006	+ .025	+ .048	+ .036	+ .042	+ .042	+ .032	+ .036
Calms.	+ .044	+ .030	+ .039	− .026	+ .045	+ .026	+ .047	+ .058	+ .052	+ .019	+ .046	+ .035

TABLE XXXIII.

Mean Abnormal Variations of the Pressure of Dry Air, with their proper signs, arranged according to the direction of the wind in each month and in the year, for the period 1860 to 1862.

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December	Year.
N.	+0.197	+0.124	+0.042	+0.061	+0.070	+0.085	+0.043	+0.072	+0.075	+0.129	+0.037	+0.247	+0.101
N. E.	+ .038	− .145	+ .046	+ .036	− .048	+ .040	− .031	− .023	+ .099	+ .068	+ .045	+ .101	+ .016
E.	+ .012	− .045	− .008	+ .045	− .037	+ .099	− .025	− .003	+ .007	− .078	+ .060	+ .082	+ .005
S. E.	− .176	− .102	+ .027	+ .190	+ .058	+ .163	− .039	− .084	+ .088	− .073	+ .004	+ .106	+ .026
S.	− .164	− .224	+ .152	+ .032	+ .058	+ .080	+ .006	− .005	− .087	+ .010	− .158	+ .111	− .003
S. W.	− .069	− .145	− .206	− .116	− .052	− .165	− .157	− .144	− .226	− .265	− .184	− .083	− .150
W.	+ .087	+ .004	− .121	− .043	− .178	− .098	− .107	− .122	− .054	− .160	− .070	− .034	− .063
N. W.	+ .115	+ .056	+ .021	+ .071	+ .017	− .021	+ .030	+ .041	+ .070	+ .023	− .041	+ .083	+ .036
Calms.	+ .087	+ .147	+ .019	+ .048	+ .067	+ .066	− .017	+ .050	+ .068	− .067	− .107	+ .135	+ .035

TABLE XXXIV.

Mean Differences, without regard to sign, between the Pressures of Dry Air at 6 *a. m. on consecutive days, for each month in the years* 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.283	0.283	0.192	0.261	0.161	0.211	0.285	0.186	0.227	0.178	0.266	0.263	0.233
1861	.275	.354	.366	.183	.251	.218	.149	.135	.236	.257	.240	.302	.247
1862	.371	.326	.216	.227	.190	.227	.192	.262	.240	.276	.215	.261	.250
Means 1860 to 1862	0.310	0.321	0.258	0.224	0.201	0.219	0.209	0.194	0.234	0.237	0.240	0.275	0.243

TABLE XXXV.

Mean Changes in the Pressure of Dry Air, with their proper signs, from 6 *a.m. to* 6 *a.m., for the period* 1860 *to* 1862, *arranged according to the daily resultant direction of the wind.*

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
N.	+0.119	+0.100	+0 215	+0.132	−0.112	+0.141	+0.122	−0.033	+0.161	+0.023	+0.106	+0.072	+0.096
N.E.	− .263	− .368	− .190	− .145	− .093	+ .070	− .089	+ .045	− .068	− .111	− .194	− .258	− .152
E.	− .598	− .413	− .301	− .178	− .142	− .155	− .149	− .115	− .345	− .253	− .276	− .305	− .240
S.E.	*	− .228	− .284	− .154	− .122	− .410	− .171	− .330	− .288	+ .008	− .495	− .261	− .264
S.	+ .032	− .404	− .478	− .171	+ .008	− .279	− .160	− .110	− .178	− .450	− .364	− .170	− .189
S.W.	− .122	− .110	− .151	+ .018	− .116	− .222	− .145	− .112	− .021	− .019	− .065	− .228	− .109
W.	+ .214	+ .189	+ .133	+ .245	+ .204	+ .098	+ .224	+ .087	+ .249	+ .169	+ .251	+ .166	+ .180
N.W.	+ .282	+ .354	+ .195	+ .175	+ .181	+ .202	+ .195	+ .284	+ .267	+ .293	+ .135	+ .252	+ .227

* No case of a S.E. resultant occurred in January.

TABLE XXXVI.

Highest and Lowest Pressures of Dry Air in each month, for 1860, 1861, *and* 1862.

Pressure of Dry Air at 32° = 27 inches + the numbers in the table.

HIGHEST.

Year.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													Pressures.	Dates.
1860	3.110	3.070	2.787	3.160	2.685	2.550	2.551	2.561	3.025	2.788	2.886	3.222	3.222	Dec. 14.
1861	3.265	3.103	3.169	2.963	2.772	2.590	2.472	2.600	2.819	2.886	2.861	3.127	3.265	Jan. 23.
1862	3.217	3.090	2.755	3.014	2.735	2.878	2.483	2.706	2.786	2.873	3.356	3.371	3.371	Dec. 20.
Means ...	3.197	3.088	2.904	3.046	2.731	2.673	2.502	2.622	2.877	2.849	3.034	3.240	3.286	
						LOWEST.								
1860	1.985	1.783	1.647	1 689	1.665	1.469	1.490	1.600	1.866	1.684	1.621	1.643	1.469	June 4.
1861	1.832	1.826	1.833	1.710	1.333	1.500	1.611	1.614	1.740	1.734	1.773	1.825	1.333	May 6.
1862	1.721	1.841	1.646	1.835	1.805	1.637	1.550	1.601	1.441	1.719	1.982	1.858	1.441	Sept. 1.
Means...	1.846	1.817	1.709	1.745	1.601	1.535	1.550	1.605	1.682	1.712	1.792	1.709	1.414	

TABLE XXXVII.

Monthly Means of the Pressure of Vapour, at each of the six observation hours, from 1860 to 1862 inclusive.

Toronto Astronomical Time.		2^h	4^h	10^h	12^h	18^h	20^h	Means.
January ..	1860	0.115	0.114	0.114	0.109	0.106	0.104	0.110
"	1861	.109	.109	.102	.099	.098	.097	.102
"	1862	.110	.109	.101	.099	.100	.100	.103
	Means	0.111	0.111	0.106	0.102	0.101	0.100	0.105
February ..	1860	0.116	0.119	0.110	0.109	0.110	0.110	0.112
"	1861	.136	.135	.133	.132	.122	.123	.130
"	1862	.109	.109	.107	.108	.105	.104	.107
	Means	0.120	0.121	0.117	0.116	0.112	0.112	0.116
March	1860	0.168	0.162	0.144	0.138	0.136	0.142	0.148
"	1861	.131	.131	.130	.126	.123	.123	.127
"	1862	.142	.139	.134	.128	.120	.127	.132
	Means	0.147	0.144	0.136	0.131	0.126	0.131	0.136
April	1860	0.198	0.193	0.191	0.182	0.170	0.175	0.185
"	1861	.216	.205	.204	.201	.179	.187	.199
"	1862	.199	.190	.177	.179	.177	.183	.184
	Means	0.204	0.196	0.191	0.187	0.175	0.182	0.189
May	1860	0.371	0.365	0.331	0.314	0.315	0.331	0.338
"	1861	.243	.241	.225	.221	.222	.240	.232
"	1862	.279	.261	.246	.238	.239	.253	.253
	Means	0.298	0.289	0.267	0.258	0.259	0.275	0.274
June	1860	0.433	0.441	0.397	0.384	0.399	0.428	0.414
"	1861	.409	.388	.370	.356	.354	.388	.377
"	1862	.378	.377	.328	.321	.320	.349	.346
	Means	0.407	0.402	0.365	0.354	0.358	0.388	0.379
July......	1860	0.442	0.420	0.419	0.409	0.420	0.454	0.427
"	1861	.511	.503	.449	.439	.431	.468	.467
"	1862	.501	.490	.452	.452	.455	.486	.473
	Means	0.485	0.471	0.440	0.433	0.435	0.469	0.456
August ...	1860	0.502	0.485	0.450	0.441	0.431	0.470	0.463
"	1861	.552	.538	.472	.461	.450	.500	.495
"	1862	.552	.548	.482	.483	.479	.515	.510
	Means	0.535	0.524	0.468	0.462	0.453	0.495	0.489
September.	1860	0.369	0.355	0.336	0.327	0.313	0.350	0.342
"	1861	.436	.430	.379	.376	.376	.401	.400
"	1862	.456	.447	.404	.389	.390	.423	.418
	Means	0.420	0.411	0.373	0.364	0.360	0.391	0.387
October ..	1860	0.286	0.285	0.269	0.263	0.262	0.265	0.272
"	1861	.312	.302	.298	.290	.264	.288	.292
"	1862	[illegible]	.318	.302	.296	.275	.282	.300
	Means	0.309	0.302	0.290	0.283	0.267	0.278	0.288
November.	1860	0.206	0.202	0.193	0.187	0.192	0.193	0.195
"	1861	.180	.179	.175	.172	.182	.181	.178
"	1862	.182	.175	.169	.167	.167	.166	.171
	Means	0.189	0.185	0.179	0.175	0.180	0.180	0.181
December .	1860	0.118	0.116	0.114	0.114	0.116	0.113	0.115
"	1861	.157	.159	.156	.149	.148	.139	.151
"	1862	.149	.146	.140	.137	.142	.136	.142
	Means	0.141	0.140	0.137	0.133	0.135	0.129	0.136

TABLE XXXVIII.

Monthly and annual means of the Pressure of Vapour furnished by six daily observations, from 1860 *to* 1862.

	Jan	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.110	0.112	0.148	0.185	0.338	0.414	0.427	0.463	0.342	0.272	0.195	0.115	0.260
1861	.102	.130	.127	.199	.232	.377	.467	.495	.400	.292	.178	.151	.262
1862	.103	.107	.132	.184	.253	.346	.473	.510	.418	.300	.171	.142	.262
Means 1860 to 1862	0.105	0.116	0.136	0.189	0.274	0.379	0.456	0.489	0.387	0.288	0.181	0.136	0.261
Means 1854 to 1859	0.112	0.104	0.133	0.184	0.266	0.407	0.507	0.458	0.384	0.247	0.176	0.120	0.258

TABLE XXXIX.

Monthly means of the Pressure of Vapour at each of the six observation hours, for the period 1860 *to* 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2h	0.111	0.120	0.147	0.204	0.298	0.407	0.485	0.535	0.420	0.309	0.189	0.141	0.280
4	.111	.121	.144	.196	.289	.402	.471	.524	.411	.302	.185	.140	.275
10	.106	.117	.136	.191	.267	.365	.440	.468	.373	.290	.179	.137	.256
12	.102	.116	.131	.187	.258	.354	.433	.462	.364	.283	.175	.133	.250
18	.101	.112	.126	.175	.259	.358	.435	.453	.360	.267	.180	.135	.247
20	.100	.112	.131	.182	.275	.388	.469	.495	.391	.278	.180	.129	.261

TABLE XL.

Monthly mean abnormal variations of the Pressure of Vapour, without regard to sign, for each month of the years 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.043	0.051	0.046	0.048	0.081	0.078	0.091	0.094	0.111	0.067	0.059	0.035	0.067
1861	.037	.041	.047	.054	.072	.087	.091	.090	.078	.076	.037	.060	.064
1862	.039	.033	.028	.056	.062	.083	.079	.113	.096	.092	.041	.046	.064
Means 1860 to 1862	0.040	0.042	0.040	0.053	0.072	0.083	0.087	0.099	0.095	0.073	0.046	0.047	0.065

TABLE XLI.

Monthly mean abnormal variations of the Pressure of Vapour, without regard to sign, at each of the six observation hours, for the period 1860 to 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2^h	0.040	0.040	0.043	0.062	0.085	0.093	0.092	0.106	0.110	0.082	0.047	0.049	0.071
4	.038	.041	043	.061	.087	.092	.097	.108	.106	.078	.045	.048	.070
10	.040	.044	.036	.056	.065	.076	.081	.096	.094	.081	.046	.049	.064
12	.041	.043	.035	.049	.066	.073	.083	.098	.089	.081	.045	.047	.063
18	.041	.043	.042	.040	.063	.078	.084	.094	.079	.074	.045	.047	.061
20	.039	.041	.042	.049	.065	.083	.083	.091	.093	.073	.044	.043	.062

TABLE XLII.

Mean abnormal variations of the Pressure of Vapour, with their proper signs, arranged according to the direction of the wind, for each year and for the winter and summer half years, from 1860 to 1862, the summer being considered to begin April 1st, and end September 30th.

	1860.			1861.			1862.			Mean 1860 to 1862.		
	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.	Winter.	Summer.	Year.
N.	−0.020	−0.011	−0.015	−0.019	−0.042	−0.031	−0.025	−0.052	−0.038	−0.022	−0.033	−0.028
N.E.	+ .031	+ .031	+ .031	+ .028	− .010	+ .011	− .013	− .030	− .021	+ .013	.000	+ .006
E.	+ .056	+ .001	+ .027	+ .032	− .008	+ .012	+ .025	− .004	+ .008	+ .036	− .004	+ .015
S.E.	+ .059	− .022	+ .017	+ .031	− .001	+ .012	+ .047	+ .001	+ .018	+ .045	− .006	+ .015
S.	+ .032	+ .007	+ .012	+ .018	+ .008	+ .011	+ .014	+ .017	+ .016	+ .020	+ .011	+ .013
S.W.	+ .016	+ .038	+ .023	+ .031	+ .040	+ .034	+ .052	+ .068	+ .059	+ .032	+ .050	+ .039
W.	− .013	− .022	− .016	− .009	− .009	− .009	− .006	− .004	− .006	− .010	− .012	− .010
N.W.	− .024	− .065	− .045	− .024	− .041	− .033	− .020	− .045	− .033	− .023	− .052	− .037
Calm.	− .001	− .018	− .008	+ .013	− .015	− .008	+ .016	− .009	+ .004	+ .009	− .014	− .005

TABLE XLIII.

Mean abnormal variations of the Pressure of Vapour, with their proper signs, arranged according to the direction of the wind, in each month and in the year, for the period 1860 to 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
N.	−0.051	−0.024	−0.009	−0.005	−0.022	−0.058	−0.067	−0.019	−0.034	+0.008	−0.014	−0.036	−0.028
N.E.	− .012	+ .036	− .003	− .003	+ .031	− .035	− .030	+ .021	− .013	+ .035	+ .018	+ .005	+ .006
E.	+ .015	+ .023	+ .011	+ .006	.000	− .062	− .018	+ .023	+ .033	+ .086	+ .046	+ .035	+ .015
S.E.	+ .023	+ .017	+ .013	− .007	− .008	− .077	− .009	+ .053	− .008	+ .086	+ .053	+ .033	+ .015
S.	+ .031	+ .026	+ .004	− .019	+ .012	− .031	− .009	+ .026	+ .058	+ .027	+ .009	+ .015	+ .013
S W.	+ .013	+ .029	+ .021	+ .021	+ .007	+ .046	+ .045	+ .065	+ .092	+ .101	− .013	+ .054	+ .039
W.	− .017	+ .002	− .001	− .003	− .008	− .029	− .012	+ .017	− .042	− .001	− .026	− .014	− .010
N.W.	− .033	− .032	− .025	− .016	− .038	− .040	− .074	− .061	− .076	− .014	− .012	− .021	− .037
Calm.	− .021	− .005	+ .016	− .002	− .027	− .044	.000	+ .002	− .014	+ .049	− .002	+ .002	− .005

TABLE XLIV.

Mean Differences, without regard to sign, between the Pressures of Vapour at 6 a.m. on consecutive days, for each month in the years 1860 to 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860 1861 1862	0.040 .034 .041	0.044 .043 .043	0.041 .047 .029	0.046 .041 .037	0.046 .044 .064	0.101 .083 .088	0.107 .070 .070	0.082 .073 .110	0.089 .089 .102	0.053 .059 .082	0.047 .043 .043	0.034 .060 .049	0.061 .056 .063
Means 1860 to 1862	0.038	0.043	0.039	0.041	0.051	0.091	0.144	0.088	0.093	0.065	0.044	0.044	0.060

TABLE XLV.

Mean changes in the Pressures of Vapour with their proper signs, from 6 a.m. to 6 a.m., for the period 1860 to 1862, arranged according to the daily resultant direction of the wind.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
N.	−0.011	−0.007	−0.021	−0.027	−0.004	−0.014	−0.016	+0.001	−0.068	−0.029	+0.020	−0.005	−0.020
N.E.	+ .026	+ .022	+ .011	+ .019	+ .018	− .007	+ .010	− .029	+ .014	+ .021	+ .022	+ .024	+ .015
E.	+ .049	+ .061	+ .034	+ .027	+ .019	+ .020	+ .053	+ .043	+ .108	+ .058	+ .022	+ .059	+ .043
S.E.	*	+ .023	− .028	+ .036	+ .031	+ .128	+ .099	+ .131	+ .109	+ .034	+ .099	+ .056	+ .085
S.	− .016	+ .042	+ .035	+ .059	+ .009	+ .119	+ .071	+ .032	+ .082	+ .136	− .017	− .001	+ .057
S.W.	+ .028	+ .004	+ .031	+ .001	+ .049	+ .075	+ .045	+ .021	+ .001	− .015	− .001	+ .027	+ .021
W.	− .022	− .019	− .022	− .032	− .048	− .039	− .090	− .039	− .061	− .060	− .023	− .032	− .036
N.W.	− .048	− .024	− .012	− .027	− .027	− .063	− .062	− .092	− .111	− .045	− .029	− .019	− .044

* No case of a S E resultant occurred in January.

TABLE XLVI.

Highest and lowest Pressures of Vapour in each month, for the years 1860, 1861, and 1862.

HIGHEST.

Year.	Jan.	* Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													Pressures.	Dates.
1860 1861 1862	0.263 .196 .244	0.202 .274 .190	0.431 .278 .230	0.388 .410 .455	0.676 .515 .484	0.714 .676 .643	0.710 .704 .734	0.822 .823 [illegible]	0.651 .672 .748	0.456 .494 .671	0.484 .295 .305	0.222 .399 .345	0.822 .823 .828	August 7th. August 5th. August 8th.
Means.........	0.234	0.255	0.313	0.419	0.558	0.678	0.716	[illegible]	0.690	0.540	0.361	0.322	0.824	

LOWEST.

Year.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Pressures.	Dates.
1860 1861 1862	0.023 .026 .025	0.022 .012 .034	0.045 .028 .062	0.050 .090 .070	0.163 .102 .110	0.142 .159 .096	0.105 .256 .221	0.209 .275 .267	0.104 .182 .172	0.131 .118 .136	0.043 .096 .083	0.029 .053 .036	0.022 .012 .025	February 1. February 7. January 4.
Means.........	0.025	0.023	0.045	0.070	0.126	0.132	0.214	0.250	0.153	0.132	0.074	0.039	0.020	

TABLE XLVII.

Monthly means of the Relative Humidity, at each of the six observation hours, from 1860 to 1862 inclusive.

Toronto Astronomical Time.	2h	4h	10h	12h	18h	20h	Means.
January .. 1860	75	76	82	84	85	82	81
" 1861	84	84	89	89	90	90	88
" 1862	75	77	80	82	86	84	81
Means	78	79	84	85	87	85	83
February . 1860	72	74	82	85	87	84	81
" 1861	80	79	86	87	88	86	84
" 1862	77	78	86	87	89	87	84
Means	76	77	85	86	88	86	83
March 1860	65	61	73	73	78	74	71
" 1861	70	70	84	85	87	83	80
" 1862	75	74	84	86	87	84	82
Means	70	68	80	81	84	80	78
April 1860	64	64	80	80	81	73	74
" 1861	65	62	75	78	81	74	73
" 1862	66	64	75	78	80	75	73
Means	65	63	77	79	81	74	73
May 1860	67	67	79	81	83	76	76
" 1861	58	58	73	77	78	71	69
" 1862	56	53	70	71	72	65	65
Means	60	59	74	76	78	71	70
June 1860	62	62	75	76	78	74	71
" 1861	59	59	74	76	75	70	69
" 1862	59	60	69	70	72	64	66
Means	60	60	73	74	75	69	69
July......... 1860	59	56	78	80	81	74	72
" 1861	65	64	78	80	80	74	73
" 1862	62	60	76	79	82	74	72
Means	62	60	77	80	81	74	72
August......1860	65	64	80	82	85	77	76
" 1861	70	70	81	83	84	78	78
" 1862	65	64	77	80	82	75	74
Means	67	66	79	82	84	77	76
September.. 1860	64	64	79	81	83	75	74
" 1861	70	70	81	83	87	81	79
" 1862	69	69	84	86	88	82	80
Means	68	68	81	83	86	79	78
October ... 1860	71	74	85	84	88	83	81
" 1861	73	73	87	88	89	84	82
" 1862	75	77	85	86	88	84	82
Means	73	75	86	86	88	84	82
November.. 1860	74	75	81	82	86	84	80
" 1861	69	72	81	81	87	84	79
" 1862	73	74	83	84	85	82	80
Means	72	74	82	82	86	83	80
December...1860	78	81	87	86	88	87	84
" 1861	72	75	82	82	85	81	79
" 1862	78	79	84	85	87	83	83
Means	76	78	84	84	87	84	82

TABLE XLVIII.

Monthly and annual means of the Relative Humidity furnished by six daily observations, from 1860 to 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	81	81	71	74	76	71	72	76	74	81	80	84	76
1861	88	84	80	73	69	69	73	78	79	82	79	79	78
1862	81	84	82	73	65	66	72	74	80	82	80	83	77
Means 1860 to 1862	83	83	78	73	70	69	72	76	78	82	80	82	77
Means 1854 to 1859	82	80	77	72	70	74	73	73	77	76	78	81	76

TABLE XLIX.

Monthly means of the Relative Humidity at each of the six observation hours, for the period 1860 to 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2^h	78	76	70	65	60	60	62	67	68	73	72	76	69
4	79	77	68	63	59	60	60	66	68	75	74	78	69
10	84	85	80	77	74	73	77	79	81	86	82	84	80
12	85	86	81	79	76	74	80	82	83	86	82	84	81
18	87	88	84	81	78	75	81	84	86	88	86	87	84
20	85	86	80	74	71	69	74	77	79	84	83	84	79

TABLE L.

Monthly mean abnormal variations of the Relative Humidity without regard to sign, for each month of the years 1860 to 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug	Sept.	Oct.	Nov.	Dec.	Year.
1860	8.2	8.1	13.3	10.5	11.2	11.1	9.9	7.7	10.3	8.4	8.6	7.1	9.5
1861	7.5	9.5	8.1	12.0	10.3	10.9	7.6	8.1	7.3	8.1	8.3	9.8	9.0
1862	8.4	8.4	8.5	10.9	13.8	15.0	11.0	8.8	7.4	8.8	7.5	7.2	9.6
Means 1860 to 1862	8.0	8.7	10.0	11.1	11.8	12.3	9.5	8.2	8.3	8.4	8.1	8.0	9.4

TABLE LI.

Monthly mean abnormal variations of the Relative Humidity without regard to sign, at each of the six observation hours, for the period 1860 to 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
2^h	9.9	11.2	12.2	12.9	12.4	14.0	11.2	10.3	10.9	10.0	10.6	10.5	11.3
4	10.2	10.9	13.5	15.1	13.7	13.8	11.9	11.7	10.8	10.9	9.8	10.0	11.9
10	7.7	8.4	9.1	9.9	11.8	11.2	9.2	7.4	7.3	7.2	7.3	7.0	8.6
12	6.6	8.3	8.6	8.7	11.0	11.2	8.2	6.5	6.6	7.4	7.6	7.3	8.2
18	6.2	6.6	8.1	8.2	10.1	11.1	7.3	6.2	6.0	6.5	6.4	6.2	7.4
20	7.6	6.6	8.3	12.1	11.6	12.7	9.1	7.2	8.4	8.3	7.1	6.9	8.8

TABLE LII.

Mean abnormal variations of the Relative Humidity, with their proper signs, arranged according to the direction of the wind, for each year and for the winter and summer half years, from 1[illegible] to 1862, the summer being considered to begin April 1st, and end September 30th

	1860.			1861			1862.			Mean 1860 to 1862.		
	Winter.	Summer.	Year.	Winter.	Summer.	Year	Winter	Summer	Year	Winter	Summer.	Year.
N.	0.0	−8.6	−2.1	+1.9	−4.7	−1.5	−0.2	−9.2	−4.5	+0.[illegible]	−5.8	−2.8
N E.	+4.9	+4.4	+4.6	+5.6	+0.6	+3.8	+2.4	−2.5	6.0	+4.2	+1.1	+2.6
E.	+6.9	+0.9	+3.9	+4.8	+1.5	+3.2	+7.0	+2.5	+4.4	+6.2	+1.8	+3.9
S E.	+3.1	−0.7	+1.1	+4.4	−0.9	+1.2	+5.0	−2.6	+0.8	+4.2	−1.4	+0.9
S	−2.1	−0.7	−0.2	+8.2	−1.6	0.0	−0.1	−2.3	−1.6	+1.6	−1.5	−0.7
S W.	−2.4	+1.7	−1.1	+0.8	−0.3	+0.4	+2.1	+0.9	+1.6	0.0	+0.8	+0.8
W.	−5.2	−3.4	−4.5	−1.3	−2.5	−1.7	−1.5	−6.0	−3.2	−2.8	−4.0	−3.2
N W.	−4.9	−5.6	−5.8	−2.4	−5.1	−3.9	−2.2	−9.7	−6.0	−8.3	−6.8	−5.1
Calms.	+1.2	+1.1	+1.2	+2.5	−1.7	−0.6	+4.8	−1.5	+1.8	+2.8	−1.8	+0.4

TABLE LIII.

Mean abnormal variations of the Relative Humidity, with their proper signs, arranged according to the direction of the wind, in each month and in the year, for the period 1860 to 1862.

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December	Year.
N.	−1.6	+3.3	+3.8	−0.5	−8.0	−12.5	−4.4	−5.6	−2.3	+0.1	−1.7	+1.[illegible]	−2.8
N E.	+5.1	+9.4	+5.6	+1.8	+3.0	−5.7	+2.5	+2.5	−0.3	+1.9	+1.2	+2.1	2.6
E.	+5.6	+9.6	+4.7	+2.0	+2.0	−2.9	+3.6	+3.5	+4.1	+9.1	+0.6	+5.3	+3.9
S.E.	+5.5	+8.5	+2.2	−5.6	−5.5	−3.5	+2.5	+3.7	+0.4	+6.3	+4.4	−2.4	+0.9
S.	+6.5	−0.3	−1.2	+2.1	−1.4	−9.6	−0.2	+0.7	−0.4	+0.2	+0.8	+5.3	−0.7
S.W.	+0.1	+1.[illegible]	[illegible].3	−2.1	−1.1	+1.2	+1.4	+1.1	+2.7	+2.1	−4.6	+0.6	+0.8
W.	−3.2	+0.[illegible]	[illegible].3	+0.9	−2.0	−9.0	−3.1	−5.1	−7.5	−1.2	−6.1	−3.0	−3.2
N W.	−2.5	[illegible]	[illegible].8	−1.1	−6.3	−12.5	−6.1	−5.4	−8.7	−3.4	−4.5	−2.0	−5.1
Calms.	+0.1	[illegible]	[illegible].6	+6.5	−1.7	−6.8	−1.8	−0.8	+0.8	+5.9	+2.5	−0.1	+0.4

TABLE LIV.

Mean difference, without regard to sign, between the Relative Humidity at 6 a.m. on consecutive days, for each month in the years 1860 to 1862.

	January.	February	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Year.
1860	9.5	6.7	12.9	10.0	10.1	12.5	10.2	7.7	11.4	7.5	10.8	6.6	9.7
1861	4.8	9.0	7.8	14.2	11.0	11.4	7.5	6.3	5.7	8.9	7.3	10.0	8.7
1863	9.4	6.1	6.1	8.2	11.9	13.4	8.6	9.1	6.0	7.1	5.7	7.5	8.3
Means 1860 to 1862	7.9	7.3	8.9	10.8	11.0	12.4	8.8	7.7	7.7	7.8	7.9	8.0	8.9

TABLE LV.

Mean changes in the Relative Humidity, with their proper signs, from 6 a.m. to 6 a.m., for the period 1860 to 1862, arranged according to the daily resultant direction of the wind.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
N.	+0.4	+0.8	−7.5	− 2.8	−2.8	+1.3	+2.6	+6.5	−3.9	−3.2	−5.1	−3.7	−1.4
N.E.	+1.4	+1.1	+0.7	− 2.9	+3.3	−3.8	−0.2	−3.0	+1.2	+0.8	+4.2	+5.8	+0.8
E.	+3.5	+2.3	+3.4	+ 3.5	+2.6	+4.9	+4.8	+1.1	+5.3	+5.2	+7.1	+5.0	+3.9
S.E.	*	+0.5	+3.0	− 2.0	−1.0	+5.3	+8.7	+0.6	+7.0	−2.5	+5.8	+1.3	+3.3
S.	+1.5	−1.0	−3.0	+21.5	−2.8	+9.5	+5.4	+5.5	+0.7	−1.0	−2.0	−6.0	+2.9
S.W.	+0.5	−8.1	−0.9	− 7.3	+4.2	+5.4	+0.9	−0.2	+2.6	−6.2	−0.3	−0.6	−0.4
W.	−1.8	−0.3	−2.8	− 1.0	−7.8	−1.6	−5.5	+0.1	−0.7	−2.9	−0.5	−1.3	−1.9
N.W.	+0.4	+2.4	+0.8	− 1.9	−2.8	−8.3	−5.6	−6.0	−4.8	+1.3	−2.2	+0.7	−2.2

* No case of a S.E. resultant occurred in January.

TABLE LVI.

Comparative view of the Annual variations of certain Meteorological elements derived from the series 1842–48, 1854–59, and 1860–1862.

Months.	Temperature.			Barometer.			Pressure of Dry Air.			Pressure of Vapour.			Relative Humidity.		
	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862
January	−19°.00	−21°.44	−22°.71	−0.003	+0.053	+0.068	+0.139	+0.200	+0.224	−.142	−.146	−.156	+ 5	+ 6	+ 6
February	−21.06	−23.09	−20.38	− .007	+ .025	− .011	+ .149	+ .180	+ .113	−.156	−.154	−.145	− 2	+ 4	+ 6
March	−14.51	−14.58	−14.12	+ .001	− .076	− .061	+ .131	+ .049	+ .064	−.140	−.125	−.125	− 3	+ 1	+ 1
April	− 1.68	− 3.47	− 3.91	+ .036	− .044	+ .017	+ .093	+ .032	+ .088	−.057	−.074	−.072	− 6	− 4	− 4
May	+ 8.59	+ 7.52	+ 7.33	− .056	− .018	− .039	− .089	− .025	− .052	+.033	+.008	+.013	− 5	− 6	− 7
June	+16.37	+17.35	+17.28	− .044	− .070	− .062	− .182	− .219	− .180	+.138	+.149	+.118	− 2	− 2	− 8
July	+21.67	+24.88	+20.94	− .032	.000	− .052	− .235	− .249	− .246	+.204	+.249	+.195	− 4	− 3	− 5
August	+21.42	+22.08	+21.59	+ .017	− .008	+ .011	− .213	− .208	− .217	+.230	+.200	+.228	+ 1	− 3	− 1
September	+13.27	+14.06	+13.75	+ .026	+ .061	+ .049	− .092	− .064	− .076	+.118	+.126	+.126	+ 2	+ 1	+ 1
October	− 0.12	+ 2.42	+ 3.94	+ .042	+ .039	+ .030	+ .064	+ .050	+ .004	−.022	−.011	+.027	+ 4	0	+ 5
November	− 8.08	− 7.26	− 7.41	+ .005	− .019	− .041	+ .083	+ .063	+ .039	−.078	−.082	−.080	+ 6	+ 2	+ 3
December	−16.89	−19.03	−16.32	+ .022	+ .056	+ .091	+ .155	+ .195	+ .215	[illegible]	−.138	−.125	+ 3	+ 5	+ 5

TABLE LVII.

Comparative view of the Annual means of the diurnal variations at the six observation hours for the same three series.

Hours.	Temperature.			Barometer.			Pressure of Dry Air.			Pressure of Vapour.			Relative Humidity.		
	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862	1842 1848	1854 1859	1860 1862
2	+ 5°.90	+ 5°.25	+ 4°.84	−0.013	−0.015	−0.016	−0.040	−0.032	−0.034	+.028	+.017	+.019	− 9	− 9	− 8
4	+ 5.56	+ 4.[illegible]	+ 4.39	− .018	− .019	− .018	− .041	− .041	− .032	+.024	+.012	+.014	− 9	− 8	− 8
10	− 2.30	− 1.85	− 1.68	− .001	+ .005	+ .005	+ .011	+ .009	+ .010	−.012	−.005	−.005	+ 8	+ 4	+ 3
12	− 3.42	− 3.99	− 2.80	− .005	+ .002	+ .004	+ .012	+ .012	+ .014	−.017	−.010	−.011	+ 5	+ 5	+ 4
18	− 4.56	− 3.95	− 3.84	+ .010	+ .009	+ .004	+ .032	+ .023	+ .020	−.022	−.014	−.014	+ 7	+ 7	+ 7
20	− 1.21	− 1.22	− 1.06	+ .025	+ .020	+ .019	+ .025	+ .020	+ .019	.000	.000	.000	+ 2	+ 2	+ 2

TABLE LVIII.

Monthly means of the extent of Sky Clouded, at each of the six observation hours, for the years 1860 to 1862.

Toronto Astronomical Time.		2^h	4^h	10^h	12^h	18^h	20^h	Year.
January ..	1860	0.81	0.77	0.54	0.47	0.82	0.86	0.71
"	1861	.77	.76	.66	.70	.80	.85	.76
"	1862	.81	.82	.62	.68	.70	.73	.73
	Means	0.80	0.78	0.61	0.62	0.77	0.81	0.73
February ..	1860	0.64	0.70	0.60	0.62	0.74	0.74	0.67
"	1861	.89	.86	.79	.78	.78	.90	.83
"	1862	.82	.72	.67	.72	.79	.86	.78
	Means	0.78	0.76	0.69	0.71	[illegible]	0.83	0.76
March , ...	1860	0.47	0.49	0.41	0.46	0.56	0.51	0.49
"	1861	.59	.61	.62	.61	.66	.63	.62
"	1862	.59	.71	.60	.55	.66	.69	.63
	Means	0.55	0.60	0.54	0.54	0.63	0.61	0.58
April	1860	0.67	0.65	0.49	0.49	0.59	0.66	0.59
"	1861	.65	.63	.54	.55	.67	.64	.61
"	1862	.68	.65	.53	.60	.68	.74	.65
	Means	0.67	0.64	0.52	0.55	0.65	0.68	0.62
May	1860	0.64	0.61	0.50	0.51	0.63	0.56	0.57
"	1861	.54	.50	.36	.45	.53	.56	.49
"	1862	.46	.44	.45	.36	.50	.47	.45
	Means	0.55	0.52	0.44	0.44	0.55	0.53	0.50
June	1860	0.66	0.65	0.47	0.44	0.60	0.65	0.58
"	1861	.52	.53	.38	.42	.37	.46	.45
"	1862	.74	.70	.42	.46	.60	.68	.60
	Means	0.64	0.63	0.42	0.44	0.52	0.60	0.54
July.........	1860	0.50	0.47	0.40	0.43	0.35	0.43	0.43
"	1861	.66	.67	.49	.42	.54	.58	.56
"	1862	.72	.59	.42	.46	.57	.62	.56
	Means	0.63	0.58	0.44	0.44	0.49	0.54	0.52
August......	1860	0.50	0.47	0.46	0.46	0.39	0.30	0.43
"	1861	.64	.64	.44	.42	.58	.54	.54
"	1862	.57	.52	.29	.36	.45	.49	.45
	Means	0.57	0.54	0.40	0.41	0.47	0.44	0.47
September..	1860	0.57	0.60	0.35	0.36	0.53	0.46	0.48
"	1861	.72	.62	.58	.50	.58	.64	.60
"	1862	.42	.38	.44	.53	.56	.50	.47
	Means	0.57	0.53	0.46	0.46	0.56	0.53	0.52
October ...	1860	0.69	0.69	0.64	0.64	0.77	0.74	0.70
"	1861	.69	.65	51	.61	.54	.64	.61
"	1862	.76	.77	.70	.66	.71	.75	.72
	Means	0.71	0.70	0.62	0.64	0.67	0.71	0.68
November..	1860	0.77	0.78	0.66	0.63	0.68	0.71	0.70
"	1861	.72	.71	.74	.73	.75	.78	.74
"	1862	.82	.79	.74	.75	.79	.82	.79
	Means	0.77	0.76	0.71	0.70	0.74	0.77	0.74
December...	1860	0.81	0.81	0.75	0.84	0.86	0.89	0.83
"	1861	.64	.64	.57	.55	.61	.68	.62
"	1862	.70	.73	.78	.86	.77	.65	.75
	Means	0.72	0.73	0.70	0.75	0.75	0.74	0.73

TABLE LIX.

Monthly and Annual means of the extent of sky clouded, from six daily observations, for 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	0.71	0.67	0.49	0.59	0.57	0.58	0.43	0.43	0.48	0.70	0.70	0.83	0.60
1861	.76	.83	.62	.61	.49	.45	.56	.54	.60	.61	.74	.62	0.62
1862	.73	.78	.63	.65	.45	.60	.56	.45	.47	.72	.79	.75	0.63
Means 1860 to 1862	0.73	0.76	0.58	0.62	0.50	0.54	0.52	0.47	0.52	0.68	0.74	0.73	0.62
Means 1854 to 1859	0.71	0.69	0.60	0.59	0.52	0.55	0.46	0.44	0.48	0.60	0.74	0.75	0.59

TABLE LX.

Monthly means of the extent of sky clouded at each observation hour, for the period 1860 *to* 1862.

Toronto Astronomical Time.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec	Year.	
													1860 to 1862.	1854 to 1859.
2^h	0.80	0.78	0.55	0.67	0.55	0.64	0.63	0.57	0.57	0.71	0.77	0.72	0.66	0.65
4	.78	.76	.60	.64	.52	.63	.58	.54	.53	.70	.76	.73	.65	.63
10	.61	.69	.54	.52	.44	.42	.44	.40	.46	.62	.71	.70	.55	.52
12	.62	.71	.54	.55	.44	.44	.44	.41	.46	.64	.70	.75	.56	.52
18	.77	.80	.63	.65	.55	.52	.49	.47	.56	.67	.74	.75	.63	.62
20	.81	.83	.61	.68	.53	.60	.54	.44	.53	.71	.77	.74	.65	.62

TABLE LXI.

Mean clouded sky, arranged according to the direction of the wind at the hour of observation, in each month and in the year, for the period 1860 *to* 1862.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
													1860 to 1862.	1854 to 1859.
N.	0.70	0.62	0.58	0.52	0.30	0.38	0.47	0.36	0.56	0.67	0.76	0.58	0.54	0.50
N E.	.87	.93	.71	.77	.65	.76	.62	.70	.71	.75	.84	.89	.76	.74
E.	.97	.97	.77	.70	.66	.68	.73	.62	.58	.80	.79	.97	.77	.70
S.E	1.00	.98	.46	.46	.36	.75	.49	.55	.60	.71	.93	.89	.63	.57
S.	0.96	.65	.42	.54	.38	.55	.55	.48	.47	.65	.84	.84	.56	.48
S.W.	.77	.74	.59	.65	.54	.62	.66	.62	.64	.57	.78	.76	.68	.67
W.	.59	.74	.58	.68	.72	.52	.59	.36	.41	.68	.71	.73	.63	.57
N.W.	.57	.59	.49	.52	.42	.40	.36	.32	.42	.56	.62	.65	.49	.53
Calms.	.72	.76	.43	.59	.34	.43	.47	.46	.48	.69	.75	.59	.55	.55

TABLE LXII.

Number of hours that each wind blew in each month and in the year, for the periods 1853–1857, 1858–1862, *and* 1853–1862.

1853–1857.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.	Sums.
January	290	189	211	126	143	98	54	42	51	130	296	598	407	228	250	313	294	3720
February	246	191	142	128	209	91	36	52	81	158	245	370	439	320	234	305	137	3384
March	132	77	77	157	188	87	99	45	127	199	361	299	428	495	472	336	136	3715
April	320	233	197	234	331	201	108	106	150	271	179	119	122	185	265	314	265	3600
May	317	116	158	296	339	263	131	120	236	328	187	95	107	164	209	429	225	3720
June	160	99	172	286	356	182	123	108	251	328	264	136	205	202	208	202	174	3456
July	230	173	144	202	303	194	140	263	313	377	179	114	122	173	193	300	300	3720
August	293	209	145	149	218	114	170	157	240	297	206	110	207	282	296	346	281	3720
September	269	218	164	195	237	143	150	157	208	253	230	141	126	196	263	314	330	3594
October.........	210	151	209	214	205	111	56	104	219	221	174	183	274	294	283	295	397	3600
November	148	101	117	276	273	97	108	104	105	220	366	465	365	265	187	207	196	3600
December......	284	241	196	150	135	100	53	49	41	118	347	585	396	248	235	302	240	3720
Year......	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975	43549

1858–1862.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.	Sums.
January	220	17	9	163	206	70	38	60	57	181	389	533	388	278	266	296	196	3720
February	207	72	0	186	198	55	59	54	47	197	274	378	401	314	283	247	200	3384
March	162	58	56	331	348	102	77	63	59	150	197	240	382	447	506	265	147	3720
April	204	142	186	410	547	170	107	89	103	117	132	172	265	337	237	303	79	3600
May	196	160	216	450	499	149	89	120	175	245	92	99	165	257	312	319	177	3720
June	237	101	104	251	319	154	62	114	270	341	227	111	167	172	388	392	190	3600
July	204	122	85	218	250	183	142	163	322	330	189	135	145	242	342	389	259	3720
August	182	163	153	158	278	176	108	125	273	300	185	129	174	295	392	404	225	3720
September	261	137	149	194	218	100	103	113	209	388	180	145	237	251	233	261	421	3600
October	251	186	159	244	269	147	67	74	142	239	278	193	274	429	270	241	257	3720
November	226	185	190	183	245	115	50	58	65	131	238	441	336	310	310	279	220	3582
December......	261	202	188	204	189	100	49	44	28	122	313	456	473	280	301	314	196	3720
Year.. ...	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567	43806

TABLE LXII.—*continued.*

1853–1862.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.	Sums.
January	510	359	420	289	349	168	92	102	108	311	685	1131	795	506	516	609	490	7440
February	453	315	302	314	407	146	95	106	128	355	519	748	840	634	517	552	337	6768
March	294	165	233	488	536	189	176	108	186	349	558	539	810	942	978	601	283	7435
April	524	375	383	644	878	371	215	195	253	388	311	291	387	522	502	617	344	7200
May	513	276	374	746	838	412	220	240	411	573	279	194	272	421	521	748	402	7440
June	397	200	276	537	675	336	185	222	521	669	491	247	372	374	596	594	364	7056
July	434	295	229	420	553	377	282	426	635	707	368	249	267	415	535	689	559	7440
August	475	372	298	307	496	290	278	282	513	597	391	239	381	577	688	750	506	7440
September	530	355	313	389	455	243	253	270	417	641	410	286	363	447	496	575	751	7194
October	461	337	368	458	474	258	123	178	261	460	452	376	548	723	553	536	654	7320
November	374	286	307	459	518	212	158	162	170	351	604	906	701	575	497	486	416	7182
December	545	443	384	354	324	200	102	93	69	240	660	1041	869	528	536	616	436	7440
Year	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7373	5542	87355

TABLE LXIII.

Number of hours that each wind blew in each quarter, including December of the same year, for 1853–57, 1858–62, *and* 1853–1862.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.	Sums.
WINTER.	1653–57	820	621	549	404	487	289	143	143	173	406	888	1553	1242	796	719	920	671	10824
	1858–62	688	496	557	553	593	225	146	158	132	500	976	1367	1262	872	850	857	592	10824
	1853–62	1508	1117	1106	957	1080	514	289	301	305	906	1864	2920	2504	1668	1569	1777	1263	21648
SPRING.	1853–57	769	426	432	687	858	551	338	271	513	798	727	513	657	844	946	1079	626	11035
	1858–62	562	390	558	1191	1394	421	273	272	337	512	421	511	812	1041	1055	887	403	11040
	1853–62	1331	816	990	1878	2252	972	611	543	850	1310	1148	1024	1469	1885	2001	1966	1029	22075
SUMMER.	1853–57	683	481	461	637	877	490	433	528	804	1002	649	360	534	657	697	848	755	10896
	1858–62	623	386	342	627	847	513	312	402	865	971	601	375	486	709	1122	1185	674	11040
	1853–62	1306	867	803	1264	1724	1003	745	930	1669	1973	1250	735	1020	1366	1819	2033	1429	21936
AUTUMN.	1853–57	627	470	490	685	715	351	314	365	532	694	770	789	765	755	733	816	923	10794
	1858–62	738	508	498	621	732	362	220	245	416	758	696	779	847	990	813	781	898	10902
	1853–62	1365	978	988	1306	1447	713	534	610	948	1452	1466	1568	1612	1745	1546	1597	1821	21696

TABLE LXIV.

Ratios shewing for each month separately the comparative duration of the different winds, being the numbers in Table LXII. expressed in terms of their respective means for all winds, EXCLUDING *calms.*

1853–1857.

	N.	N. N. E.	N. E.	E. N. E.	E.	E. S. E.	S. E.	S. S. E.	S.	S. S. W.	S. W.	W. S. W.	W.	W. N. W.	N. W.	N. N. W.
January	1.35	0.88	0.99	0.59	0.67	0.46	0.25	0.20	0.24	0.61	1.39	2.79	1.90	1.06	1.17	1.46
February	1.21	0.94	0.70	0.63	1.03	0.45	0.18	0.26	0.40	0.78	1.21	1.82	2.16	1.58	1.15	1.50
March	0.59	0.34	0.34	0.70	0.84	0.39	0.44	0.20	0.57	0.89	1.61	1.34	1.91	2.21	2.11	1.50
April	1.54	1.12	0.94	1.12	1.59	0.96	0.52	0.51	0.72	1.30	0.86	0.57	0.58	0.89	1.27	1.51
May	1.45	0.53	0.72	1.36	1.55	1.20	0.60	0.55	1.08	1.50	0.86	0.44	0.49	0.75	0.96	1.96
June	0.78	0.48	0.84	1.39	1.74	0.89	0.60	0.53	1.22	1.60	1.29	0.66	1.00	0.98	1.01	0.99
July	1.08	0.81	0.67	0.95	1.42	0.91	0.66	1.23	1.46	1.76	0.84	0.53	0.57	0.81	0.90	1.40
August	1.33	0.97	0.68	0.69	1.01	0.53	0.79	0.73	1.12	1.38	0.96	0.51	0.96	1.31	1.38	1.61
September	1.32	1.07	0.80	0.96	1.16	0.70	0.73	0.77	1.02	1.24	1.13	0.69	0.62	0.96	1.29	1.54
October	1.05	0.75	1.04	1.07	1.02	0.55	0.28	0.52	1.09	1.10	0.87	0.91	1.37	1.47	1.41	1.47
November	0.70	0.47	0.55	1.30	1.28	0.46	0.51	0.49	0.49	1.03	1.72	2.19	1.72	1.25	0.88	0.97
December	1.31	1.11	0.90	0.69	0.62	0.46	0.24	0.22	0.19	0.54	1.60	2.69	1.82	1.14	1.08	1.39
Year	1.14	0.79	0.76	0.95	1.16	0.66	0.48	0.52	0.80	1.14	1.20	1.27	1.26	1.20	1.22	1.44
Arithmetic Means	1.14	0.79	0.77	0.95	1.16	0.66	0.48	0.52	0.80	1.15	1.19	1.26	1.26	1.20	1.22	1.44

1858–1862.

	N.	N. N. E.	N. E.	E. N. E.	E.	E. S. E.	S. E.	S. S. E.	S.	S. S. W.	S. W.	W. S. W.	W.	W. N. W.	N. W.	N. N. W.
January	1.00	0.77	0.95	0.74	0.94	0.32	0.17	0.27	0.26	0.82	1.77	2.42	1.76	1.26	1.21	1.34
February	1.04	0.62	0.80	0.94	0.99	0.28	0.30	0.27	0.24	0.99	1.38	1.90	2.01	1.58	1.42	1.24
March	0.73	0.39	0.70	1.48	1.56	0.46	0.34	0.28	0.26	0.67	0.88	1.08	1.71	2.00	2.27	1.19
April	0.93	0.64	0.85	1.86	2.49	0.77	0.49	0.40	0.47	0.53	0.60	0.78	1.20	1.53	1.08	1.38
May	0.88	0.72	0.98	2.03	2.25	0.67	0.40	0.54	0.79	1.11	0.42	0.45	0.75	1.16	1.41	1.44
June	1.11	0.47	0.49	1.18	1.50	0.72	0.29	0.53	1.27	1.60	1.07	0.52	0.78	0.81	1.82	1.84
July	0.94	0.56	0.39	1.01	1.16	0.85	0.66	0.75	1.49	1.53	0.87	0.62	0.67	1.12	1.58	1.80
August	0.83	0.75	0.70	0.72	1.27	0.81	0.49	0.57	1.25	1.37	0.85	0.59	0.80	1.35	1.80	1.85
September	1.31	0.69	0.75	0.98	1.10	0.50	0.52	0.57	1.05	1.95	0.91	0.73	1.19	1.26	1.17	1.31
October	1.16	0.86	0.74	1.13	1.24	0.68	0.31	0.34	0.66	1.10	1.28	0.89	1.27	1.98	1.25	1.11
November	1.08	0.88	0.90	0.87	1.17	0.55	0.24	0.28	0.31	0.62	1.13	2.10	1.60	1.48	1.48	1.33
December	1.18	0.92	0.85	0.93	0.86	0.45	0.22	0.20	0.13	0.55	1.42	2.07	2.15	1.27	1.37	1.43
Year	1.01	0.69	0.76	1.16	1.38	0.59	0.37	0.42	0.68	1.06	1.05	1.18	1.32	1.40	1.49	1.44
Arithmetic Means	1.02	0.69	0.76	1.15	1.38	0.59	0.37	0.42	0.68	1.07	1.05	1.18	1.32	1.40	1.49	1.44

TABLE LXIV.—*Continued.*

1853-1862.

	N.	N. N. E.	N. E.	E. N. E.	E.	E. S. E.	S. E.	S. S. E.	S.	S. S. W.	S. W.	W. S.W.	W.	W. N.W.	N. W.	N. N. W.
January........	1.17	0.83	0.97	0.67	0.80	0.39	0.21	0.23	0.25	1.72	1.58	2.60	1.83	1.16	1.19	1.40
February......	1.13	0.78	0.75	0.78	1.01	0.36	0.24	0.26	0.32	0.88	1.29	1.86	2.09	1.58	1.29	1.37
March	0.66	0.37	0.52	1.09	1.20	0.42	0.39	0.24	0.42	0.78	1.25	1.21	1.81	2.11	2.19	1.34
April...........	1.22	0.87	0.89	1.50	2.05	0.87	0.50	0.46	0.59	0.91	0.73	0.68	0.90	1.22	1.17	1.44
May..........	1.17	0.63	0.85	1.70	1.90	0.94	0.50	0.55	0.93	1.30	0.63	0.44	0.62	0.96	1.18	1.70
June	0.95	0.48	0.66	1.28	1.61	0.80	0.44	0.53	1.25	1.60	1.17	0.59	0.89	0.89	1.43	1.42
July.............	1.01	0.69	0.53	0.98	1.29	0.88	0.66	0.99	1.48	1.64	0.86	0.58	0.62	0.96	1.24	1.60
August...	1.10	0.86	0.69	0.71	1.14	0.67	0.64	0.65	1.18	1.38	0.90	0.55	0.88	1.33	1.59	1.75
September....	1.32	0.88	0.78	0.97	1.13	0.60	0.63	0.67	1.04	1.59	1.02	0.71	0.90	1.11	1.23	1.43
October.........	1.11	0.81	0.88	1.10	1.14	0.62	0.29	0.43	0.87	1.10	1.09	0.90	1.31	1.73	1.33	1.29
November.....	0.88	0.68	0.73	1.09	1.22	0.50	0.37	0.38	0.40	0.83	1.43	2.14	1.66	1.36	1.18	1.15
December......	1.24	1.01	0.88	0.81	0.74	0.46	0.23	0.21	0.16	0.55	1.51	2.38	1.98	1.21	1.22	1.41
Year	1.08	0.74	0.76	1.06	1.27	0.63	0.43	0.47	0.74	1.10	1.12	1.22	1.29	1.30	1.36	1.44
Arithmetic Means	1.08	0.74	0.76	1.05	1.27	0.63	0.43	0.47	0.74	1.11	1.12	1.22	1.29	1.30	1.35	1.44

TABLE LXV.

Ratios showing for each quarter the comparative duration of the different winds, being the numbers in Table LXIII. expressed in terms of their respective means for all winds, EXCLUDING *calms*

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.
WINTER	1853-57	1.29	0.98	0.86	0.64	0.77	0.46	0.23	0.22	0.27	0.64	1.40	2.45	1.96	1.25	1.13	1.45
	1858-62	1.08	0.78	0.87	0.86	0.93	0.35	0.23	0.25	0.21	0.78	1.53	2.14	1.97	1.36	1.33	1.34
	1853-62	1.18	0.88	0.87	0.75	0.85	0.40	0.23	0.24	0.24	0.71	1.46	2.29	1.96	1.31	1.23	1.40
SPRING.	1853-57	1.18	0.65	0.66	1.06	1.32	0.85	0.52	0.42	0.79	1.23	1.12	0.79	1.01	1.30	1.45	1.66
	1858-62	0.84	0.59	0.84	1.79	2.10	0.63	0.41	0.41	0.51	0.77	0.63	0.77	1.22	1.57	1.59	1.33
	1853-62	1.01	0.62	0.75	1.43	1.71	0.74	0.46	0.41	0.65	1.00	0.87	0.78	1.12	1.43	1.52	1.50
SUMMER	1853-57	1.08	0.76	0.73	1.01	1.38	0.77	0.68	0.83	1.27	1.58	1.02	0.57	0.84	1.04	1.10	1.34
	1858-62	0.96	0.60	0.53	0.97	1.31	0.79	0.48	0.62	1.33	1.50	0.93	0.58	0.75	1.09	1.73	1.83
	1853-62	1.02	0.68	0.63	0.99	1.34	0.78	0.58	0.73	1.30	1.54	0.97	0.57	0.80	1.07	1.42	1.59
AUTUMN	1853-57	1.02	0.76	0.79	1.11	1.16	0.57	0.51	0.59	0.86	1.13	1.25	1.28	1.24	1.22	1.19	1.32
	1858-62	1.18	0.81	0.80	0.99	1.17	0.58	0.35	0.39	0.67	1.21	1.11	1.25	1.36	1.58	1.30	1.25
	1853-62	1.10	0.79	0.80	1.05	1.17	0.57	0.43	0.49	0.76	1.17	1.18	1.26	1.30	1.40	1.24	1.29

⁂ *For Table LXVI. see Introduction, foot of page viii.*

TABLE LXVII.

Ratios shewing the annual distribution of each wind, being the numbers in Table LXIV. expressed in terms of their respective yearly Arithmetic means.

1853–1857.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.
January........	1.18	1.12	1.29	0.62	0.58	0.69	0.52	0.38	0.30	0.53	1.16	2.21	1.51	0.89	0.96	1.01
February	1.06	1.19	0.91	0.66	0.89	0.68	0.37	0.49	0.50	0.68	1.01	1.45	1.72	1.31	0.95	1.04
March..........	0.52	0.44	0.45	0.74	0.72	0.59	0.92	0.39	0.71	0.78	1.35	1.06	1.52	1.84	1.73	1.04
April	1.34	1.41	1.24	1.18	1.37	1.45	1.07	0.99	0.90	1.14	0.72	0.45	0.46	0.74	1.04	1.04
May	1.27	0.67	0.94	1.42	1.34	1.81	1.24	1.06	1.35	1.31	0.72	0.35	0.39	0.63	0.79	1.36
June	0.68	0.61	1.10	0.99	1.50	1.34	1.24	1.02	1.53	1.40	1.08	0.52	0.79	0.82	0.83	0.68
July.............	0.94	1.02	0.88	1.46	1.22	1.37	1.35	2.38	1.83	1.54	0.70	0.42	0.45	0.67	0.74	0.97
August	1.19	1.23	0.88	0.73	0.87	0.80	1.64	1.41	1.39	1.21	0.80	0.41	0.77	1.09	1.13	1.12
September	1.15	1.35	1.05	1.00	1.00	1.06	1.52	1.49	1.27	1.08	0.95	0.55	0.49	0.80	1.06	1.07
October	0.92	0.95	1.36	1.12	0.88	0.83	0.58	1.00	1.37	0.96	0.73	0.72	1.09	1.22	1.16	1.02
November	0.61	0.60	0.72	1.36	1.10	0.69	1.05	0.95	0.62	0.90	1.44	1.73	1.36	1.04	0.72	0.67
December	1.14	1.40	1.18	0.72	0.53	0.69	0.50	0.44	0.24	0.47	1.34	2.13	1.45	0.95	0.39	0.96

1858–1862.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N. W.	N.N.W.
January...	0.98	1.12	1.25	0.64	0.68	0.54	0.47	0.65	0.38	0.77	1.69	2.05	1.33	0.90	0.81	0.94
February.......	1.02	0.90	1.06	0.81	0.72	0.47	0.80	0.65	0.35	0.92	1.31	1.61	1.52	1.13	0.9[illegible]	0.86
March..........	0.71	0.57	0.92	1.28	1.13	0.78	0.93	0.67	0.39	0.63	0.84	0.91	1.29	1.43	1.52	0.83
April...........	0.91	0.93	1.12	1.61	1.81	1.31	1.32	0.97	0.69	0.50	0.57	0.66	0.91	1.09	0.72	0.96
May	0.87	1.05	1.29	1.76	1.64	1.14	1.09	1.30	1.16	1.03	0.40	0.38	0.56	0.83	0.95	1.00
June	1.09	0.69	0.64	1.02	1.09	1.23	0.79	1.28	1.80	1.49	1.02	0.44	0.59	0.58	1.22	1.28
July.............	0.93	0.82	0.52	0.87	0.84	1.44	1.78	1.80	2.19	1.42	0.83	0.53	0.51	0.80	1.06	1.25
August..........	0.82	1.08	0.92	0.63	0.92	1.37	1.34	1.37	1.84	1.28	0.81	0.50	0.60	0.96	1.21	1.29
September	1.29	1.00	0.99	0.85	0.80	0.86	1.40	1.36	1.55	1.82	0.86	0.62	0.90	0.90	0.79	0.91
October	1.14	1.24	0.97	0.98	0.90	1.16	0.84	0.82	0.96	1.03	1.23	0.76	0.96	1.42	0.84	0.77
November	1.06	1.27	1.19	0.75	0.85	0.93	0.64	0.66	0.45	0.58	1.08	1.78	1.21	1.05	0.99	0.92
December......	1.17	1.33	1.13	0.80	0.62	0.77	0.60	0.48	0.19	0.52	1.36	1.76	1.62	0.91	0.92	0.99

TABLE LXVII.—*Continued.*

1853–1862.

	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W	W.	W.N.W.	N.W.	N.N.W.
January	1.09	1.12	1.27	0.63	0.63	0.62	0.50	0.50	0.34	0.65	1.41	2.13	1.42	0.90	0.88	0.97
February	1.04	1.06	0.99	0.74	0.80	0.58	0.55	0.57	0.43	0.80	1.15	1.53	1.62	1.21	0.95	0.95
March	0.61	0.50	0.69	1.03	0.94	0.68	0.93	0.52	0.56	0.71	1.11	0.99	1.40	1.62	1.62	0.93
April	1.13	1.18	1.17	1.42	1.61	1.39	1.18	0.97	0.80	0.82	0.65	0.56	0.70	0.94	0.87	1.00
May	1.08	0.85	1.12	1.61	1.50	1.50	1.17	1.17	1.26	1.18	0.57	0.36	0.48	0.73	0.88	1.18
June	0.88	0.65	0.87	1.22	1.27	1.28	1.04	1.14	1.68	1.44	1.05	0.48	0.69	0.69	1.05	0.99
July	0.93	0.93	0.70	0.93	1.01	1.40	1.54	2.12	2.00	1.48	0.76	0.47	0.48	0.74	0.92	1.11
August	1.02	1.16	0.91	0.67	0.90	1.07	1.50	1.39	1.60	1.24	0.80	0.45	0.68	1.02	1.17	1.20
September	1.22	1.19	1.02	0.91	0.89	0.96	1.47	1.43	1.40	1.44	0.91	0.58	0.70	0.85	0.91	0.99
October.........	1.03	1.09	1.16	1.04	0.90	0.99	0.69	0.91	1.17	1.00	0.97	0.74	1.02	1.33	0.98	0.89
November	0.82	0.91	0.95	1.03	0.96	0.80	0.88	0.82	0.54	0.75	1.27	1.76	1.28	1.04	0.87	0.80
December......	1.15	1.37	1.15	0.77	0.53	0.73	0.55	0.45	0.21	0.49	1.35	1.95	1.54	0.93	0.90	0.98

TABLE LXVIII.

Quarterly averages of the ratios in Table LXVII.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.
1853 to 1857	Winter ...	1.13	1.24	1.13	0.67	0.67	0.69	0.46	0.44	0.35	0.56	1.17	1.93	1.56	1.05	0.93	1.00
	Spring ...	1.04	0.84	0.88	1.11	1.14	1.28	1.08	0.81	0.99	1.08	0.93	0.62	0.79	1.07	1.19	1.15
	Summer.	0.94	0.95	0.95	1.06	1.20	1.17	1.41	1.60	1.58	1.38	0.86	0.45	0.67	0.86	0.90	0.92
	Autumn.	0.89	0.97	1.04	1.16	0.99	0.86	1.05	1.15	1.09	0.98	1.04	1.00	0.98	1.02	0.98	0.92
1858 to 1862	Winter ...	1.06	1.12	1.15	0.75	0.67	0.59	0.62	0.59	0.31	0.74	1.45	1.81	1.49	0.93	0.90	0.93
	Spring ...	0.83	0.85	1.11	1.55	1.53	1.08	1.11	0.98	0.75	0.72	0.60	0.65	0.92	1.12	1.06	0.93
	Summer.	0.95	0.86	0.69	0.84	0.95	1.35	1.30	1.48	1.96	1.40	0.89	0.49	0.57	0.78	1.16	1.27
	Autumn.	1.16	1.17	1.05	0.86	0.85	0.98	0.96	0.95	0.99	1.14	1.06	1.05	1.02	1.12	0.87	0.87
1853 to 1862	Winter ...	1.09	1.18	1.14	0.71	0.67	0.64	0.53	0.51	0.33	0.65	1.30	1.87	1.53	1.01	0.91	0.97
	Spring ...	0.94	0.84	0.99	1.35	1.35	1.19	1.09	0.89	0.87	0.90	0.78	0.64	0.86	1.10	1.12	1.04
	Summer.	0.94	0.91	0.83	0.94	1.06	1.25	1.36	1.55	1.76	1.39	0.87	0.47	0.62	0.82	1.05	1.10
	Autumn.	1.02	1.06	1.04	0.99	0.92	0.92	1.01	1.05	1.04	1.06	1.05	1.03	1.00	1.07	0.92	0.89

WINDS in the upper strata as shown by the motion of the clouds, from six daily observations during the years 1854 to 1862 inclusive.

TABLE LXIX.

Absolute number of the several upper currents in each month, in the two half-years, and in the year; the summer half-year being considered to extend from April to September inclusive.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Winter.	Summer.	Year.
N.	18	12	12	25	26	24	27	28	26	45	33	38	158	156	314
N E.	19	9	8	17	33	21	21	13	17	28	17	10	91	122	213
E.	24	32	38	49	46	44	54	34	35	43	50	28	215	262	477
S.E.	23	18	23	18	33	19	24	16	18	27	35	15	141	128	269
S	10	6	15	11	30	10	4	9	15	21	23	20	95	79	174
S.W.	71	80	70	92	84	76	77	80	93	116	94	66	497	502	999
W.	273	259	292	361	282	413	481	415	395	305	319	253	1701	2347	4048
N. W.	137	123	164	140	155	145	183	235	156	200	214	181	1019	1014	2033
Calm Sky (*a*)	677	607	505	377	379	363	281	269	305	412	478	646	3325	1974	5299
Clear Sky (*a*)	185	167	301	272	364	283	312	362	342	263	135	132	1183	1935	3118
Means including (*a*)	144	121	143	136	144	140	146	146	140	146	140	139	842	852	1694
Means excluding (*a*)	72	67	78	88	87	94	109	104	94	98	98	76	490	576	1066

TABLE LXX.

Ratios shewing for each month separately as well as for the winter, summer, and year, the relative frequency of the several upper currents, including the cases of calm sky and clear sky, being the numbers in Table LXIX. expressed in terms of the means in the lowest line but one in the same table.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Winter.	Summer.	Year.
N.	0.13	0.09	0.08	0.18	0.18	0.17	0.18	0.19	0.18	0.31	0.24	0.27	0.19	0.18	0.19
N E.	0.13	0.07	0.06	0.13	0.23	0.15	0.14	0.09	0.12	0.19	0.12	0.07	0.11	0.14	0.13
E	0.17	0.24	0.27	0.36	0.32	0.32	0.37	0.23	0.25	0.29	0.36	0.20	0.26	0.31	0.28
S E.	0.16	0.14	0.16	0.10	0.26	0.14	0.16	0.11	0.13	0.18	0.25	0.11	0.17	0.15	0.16
S.	0.07	0.05	0.10	0.08	0.21	0.07	0.03	0.06	0.11	0.14	0.17	0.14	0.11	0.09	0.10
S W.	0.49	0.61	0.49	0.68	0.59	0.54	0.53	0.55	0.66	0.79	0.67	0.48	0.59	0.59	0.59
W.	1.90	1.97	2.04	2.66	1.96	2.95	3.29	2.84	2.82	2.09	2.28	1.83	2.02	2.75	2.39
N.W.	0.95	0.94	1.15	1.03	1.08	1.04	1.25	1.61	1.11	1.37	1.53	1.30	1.21	1.19	1.20
Calm Sky.	4.71	4.62	3.54	2.78	2.64	2.60	1.92	1.84	2.17	2.82	3.42	4.65	3.95	2.32	3.13
Clear Sky.	1.29	1.27	2.11	2.00	2.53	2.02	2.13	2.48	2.44	1.80	0.97	0.95	1.40	2.27	1.84

TABLE LXXI.

Ratios shewing for each month separately, as well as for the two half-years and year, the relative frequency of the several upper currents, excluding the cases of calm sky and clear sky, being the numbers in Table LXIX. expressed in terms of the means in the lowest line of that table.

	Jan	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Winter.	Summer.	Year.
N.	0.25	0.18	0.15	0.28	0.30	0.26	0.25	0.27	0.27	0.46	0.34	0.50	0.32	0.27	0.29
N.E.	0.26	0.13	0.10	0.19	0.38	0.22	0.19	0.12	0.18	0.28	0.17	0.13	0.19	0.21	0.20
E.	0.33	0.47	0.49	0.55	0.53	0.47	0.50	0.33	0.37	0.44	0.51	0.37	0.44	0.46	0.45
S.E.	0.32	0.27	0.30	0.15	0.44	0.20	0.22	0.15	0.19	0.27	0.36	0.20	0.29	0.22	0.25
S.	0.14	0.09	0.19	0.12	0.35	0.11	0.04	0.09	0.16	0.21	0.23	0.26	0.19	0.14	0.16
S W.	0.99	1.19	0.90	1.04	0.97	0.81	0.71	0.77	0.98	1.18	0.96	0.86	1.02	0.87	0.94
W.	3.80	3.84	3.76	4.08	3.25	4.39	4.42	4.00	4.18	3.11	3.25	3.31	3.47	4.07	3.80
N.W.	1.91	1.82	2.11	1.58	1.79	1.54	1.68	2.27	1.65	2.04	2.18	2.37	2.08	1.76	1.91

Comparison of the half-yearly and yearly ratios in Tables LXX. and LXXI., with the ratios derived in a similar manner from the observations made at 8 a. m., 2 p. m., and 4 p. m., as well as those derived from the observations at 10 p. m., midnight, and 6 a. m.

TABLE LXXII.

INCLUDING CALM SKY AND CLEAR SKY.

	8 A. M., 2 P. M and 4 P. M.			10 P. M, Mid., and 6 A. M.			Six Hours.		
	Winter.	Summer	Year.	Winter.	Summer	Year.	Winter.	Summer	Year.
N.	0.25	0.23	0.24	0.12	0.13	0.13	0.19	0.18	0.19
N. E.	0.17	0.21	0.19	0.04	0.08	0.06	0.11	0.14	0.13
E.	0 41	0.43	0.42	0.10	0.18	0.14	0.26	0.31	0.28
S. E.	0 24	0.21	0.23	0.09	0.09	0.09	0.17	0.15	0.16
S.	0.16	0.12	0.14	0.06	0.06	0.06	0.11	0.09	0.10
S. W.	0 91	0.83	0.87	0.27	0.34	0.31	0.59	0.59	0.59
W.	2.92	3.63	3.28	1.11	1.86	1.49	2.02	2.75	2.39
N. W.	1 57	1.49	1.53	0.84	0.89	0.87	1.21	1.19	1.20
Calm sky	2.50	1.43	1.96	5.41	3.22	4.31	3.95	2.32	3.13
Clear sky	0.87	1.40	1.14	1.94	3.15	2.55	1.40	2.27	1.84

TABLE LXXIII.

EXCLUDING CALM SKY AND CLEAR SKY.

	8 A. M., 2 P. M. and 4 P. M.			10 P. M., Mid., and 6 A. M.			Six Hours.		
	Winter.	Summer	Year.	Winter.	Summer	Year.	Winter.	Summer	Year.
N.	0.30	0.27	0.28	0.37	0.28	0.32	0.32	0.27	0.29
N. E.	0.21	0.23	0.22	0.13	0.17	0.15	0.19	0.21	0.20
E.	0.49	0.48	0.48	0.31	0.41	0.37	0.44	0.45	0.45
S. E.	0.29	0.24	0.26	0.29	0.19	0.23	0.29	0.22	0.25
S.	0.19	0.14	0.17	0.19	0.14	0.16	0.19	0.1[illegible]	0.16
S. W.	1.09	0.93	1.01	0.82	0.76	0.79	1.02	0.87	0.94
W.	3.52	4.06	3.80	3.34	4.10	3.79	3.47	4.07	3.80
N. W.	1.90	1.66	1.78	2.54	1.96	2.20	2.08	1.76	1.91

TABLE LXXIV.

Ratios shewing the annual distribution of each upper wind, and comparing the frequency of each wind in the six winter months, with its frequency in the six summer months.

	January.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Ratios comparing Winter with Summer.		
													2^h, 4^h & 20^h.	10^h, 12^h & 18^h	Six hours.
N.	0.68	0.49	0.46	1.00	0.98	0.93	1.00	1.04	1.00	1.67	1.28	1.48	1.07	0.97	1.03
N. E.	1.06	0.55	0.45	1.00	1.84	1.20	1.14	0.71	0.97	1.54	0.98	0.58	0.82	0.57	0.76
E.	0.59	0.87	0.94	1.28	1.14	1.12	1.31	0.83	0.89	1.05	1.27	0.72	0.95	0.56	0.83
S. E.	1.01	0.87	1.02	0.61	1.67	0.86	1.04	0.69	0.81	1.17	1.58	0.68	1.13	1.09	1.11
S.	0.68	0.45	1.02	0.79	2.04	0.70	0.26	0.60	1.04	1.40	1.61	1.40	1.30	1.05	1.21
S. W.	0.84	1.03	0.83	1.15	0.99	0.92	0.89	0.93	1.12	1.35	1.14	0.81	1.09	0.79	1.00
W.	0.80	0.83	0.86	1.11	0.82	1.24	1.38	1.19	1.18	0.88	0.96	0.77	0.80	0.60	0.73
N. W.	0.80	0.78	0.96	0.86	0.90	0.87	1.04	1.34	0.93	1.14	1.28	1.09	1.06	0.95	1.02
Calm sky.	1.50	1.47	1.13	0.88	0.84	0.83	0.61	0.59	0.69	0.90	1.09	1.48	1.75	1.68	1.70
Clear sky.	0.70	0.69	1.15	1.09	1.38	1.10	1.16	1.35	1.33	0.98	0.53	0.52	0.62	0.61	0.62

WINDS IN THE UPPER STRATA.

TABLE LXXV.

Absolute number of the several upper currents at each of the six observation hours.

	6 A. M.	8 A. M.	2 P. M.	4 P. M.	10 P. M.	Mid.	6 A. M. 10 P. M. Mid.	8 A. M. 2 P. M. 4 P. M.	Six-hour Means
N.	45	69	68	71	31	30	106	208	52
N. E.	24	59	61	52	12	14	50	163	35
E.	77	129	120	107	20	24	121	356	79
S. E.	47	72	63	57	10	20	77	192	45
S.	27	42	45	34	12	14	53	121	29
S. W.	137	229	274	236	65	58	260	739	166
W.	532	787	974	1033	372	350	1254	2794	675
N. W.	273	381	470	453	246	210	729	1304	339
Calm sky (*a*)	1167	663	509	497	1216	1247	3630	1669	883
Clear sky (*a*)	497	412	265	294	818	832	2147	971	520
Means including (*a*)	283	283	285	283	280	280	843	852	282
Means excluding (*a*)	145	220	259	255	96	90	331	735	178

TABLE LXXVI.

Ratios shewing for each hour separately the relative frequency of the different upper winds, including the cases of calm and clear sky.

	6 A. M.	8 A. M.	2 P. M.	4 P. M.	10 P. M.	Mid.	6 A. M. 10 P. M. Mid.	8 A. M. 2 P. M. 4 P. M.
N.	0.16	0.24	0.24	0.25	0.11	0.11	0.13	0.24
N. E.	0.09	0.18	0.21	0.18	0.04	0.05	0.06	0.19
E.	0.27	0.46	0.42	0.38	0.07	0.09	0.14	0.42
S. E.	0.17	0.25	0.22	0.20	0.04	0.07	0.09	0.23
S.	0.10	0.15	0.16	0.12	0.04	0.05	0.06	0.14
S. W.	0.48	0.81	0.96	0.83	0.23	0.21	0.31	0.87
W.	1.88	2.78	3.42	3.64	1.33	1.25	1.49	3.28
N. W.	0.97	1.34	1.65	1.60	0.88	0.75	0.87	1.53
Calm sky.	4.13	2.34	1.79	1.75	4.34	4.46	4.31	1.96
Clear sky.	1.76	1.45	0.93	1.04	2.92	2.97	2.55	1.14

TABLE LXXVII.

Ratios shewing for each hour separately the relative frequency of the different upper winds, excluding the cases when the sky was calm and when it was clear.

	6 A. M.	8 A. M.	2 P. M.	4 P. M.	10 P. M.	Mid.	6 A. M. 10 P. M. Mid.	8 A. M. 2 P. M. 4 P. M.
N.	0.31	0.31	0.26	0.28	0.32	0.33	0.32	0.28
N. E.	0.17	0.23	0.23	0.20	0.13	0.16	0.15	0.22
E.	0.53	0.59	0.46	0.42	0.21	0.27	0.37	0.48
S. E.	0.32	0.33	0.24	0.22	0.10	0.22	0.23	0.26
S.	0.19	0.19	0.17	0.13	0.13	0.16	0.16	0.16
S. W.	0.94	1.04	1.06	0.92	0.68	0.64	0.79	1.01
W.	3.66	3.58	3.76	4.04	3.87	3.89	3.79	3.80
N. W.	1.88	1.73	1.81	1.77	2.56	2.33	2.20	1.78

TABLE LXXVIII.

Ratios shewing the diurnal distribution of each upper wind, and comparing their frequency at the hours 2^h, 4^h, and 20^h, with their frequency at the hours 10^h, midnight, and 18^h.

	6 A. M.	8 A. M.	2 P. M.	4 P. M.	10 P. M.	Mid.	Ratios comparing 2^h, 4^h, & 20^h with 10^h, mid. & 18^h		
							Winter	Summer	Year.
N.	0.86	1.32	1.30	1.36	0.59	0.57	2.02	1.86	1.94
N. E.	0.68	1.41	1.72	1.47	0.34	0.39	4.00	2.76	3.24
E.	0.97	1.62	1.51	1.35	0.25	0.30	3.95	2.33	2.90
S. E.	1.05	1.61	1.41	1.27	0.22	0.45	2.52	2.44	2.47
S.	0.93	1.45	1.55	1.17	0.41	0.48	2.52	2.03	2.25
S. W.	0.82	1.38	1.65	1.42	0.39	0.35	3.33	2.41	2.81
W.	0.79	1.17	1.44	1.53	0.55	0.52	2.63	1.95	2.20
N. W.	0.81	1.12	1.39	1.34	0.73	0.62	1.87	1.68	1.77
Calm sky.	1.32	0.75	0.58	0.56	1.38	1.41	0.46	0.45	0.45
Clear sky	0.96	0.79	0.51	0.57	1.57	1.60	0.45	0.45	0.45

WINDS in the Upper Strata, from six daily observations in the years 1860 to 1862, considered with reference to the Simultaneous Surface Winds.

TABLE LXXIX.

Absolute Number of the several Upper Currents accompanying each Surface Wind.

		SURFACE WINDS.								
		N.	N.E.	E.	S.E.	S.	S W.	W.	N.W.	CALMS.
Direction from which the clouds were moving.	N.	29	1	2	2	0	5	3	51	2
	N.E.	27	14	5	5	1	0	0	7	3
	E.	16	44	86	6	2	1	1	6	2
	S.E.	6	12	47	2	2	6	0	2	1
	S.	3	9	12	3	6	3	4	2	4
	S W.	10	30	66	24	42	104	51	31	22
	W.	106	71	116	61	159	258	313	229	99
	N.W.	74	24	27	24	60	66	138	208	52
	Calm.	288	253	320	75	116	228	225	301	180
	Clear.	210	68	65	35	66	102	126	311	120
Total No. of each surface wind		769	526	746	237	454	773	861	1148	485
Mean*		77	53	75	24	45	77	86	115	48
Total No., excluding calm and clear sky		271	205	361	127	272	443	510	536	185
Mean‡‡..........................		34	26	45	16	34	55	64	67	23

TABLE LXXX.

*Relative frequency of the different Upper Currents, including the cases when the sky was calm and when it was clear, being the numbers in Table LXXIX., expressed in terms of the means of each corresponding surface wind given in the line marked *.*

		SURFACE WINDS.								
		N.	N.E.	E.	S E.	S.	S.W.	W.	N.W.	CALMS.
Direction from which the clouds were moving.	N.	0.38	0 02	0.03	0.08	0 00	0.06	0.03	0.44	0.04
	N.E.	0.35	0 27	0.07	0.21	0 02	0.00	0 00	0.06	0 06
	E.	0.21	0.84	1.15	0.25	0.04	0.01	0.01	0 05	0.04
	S.E.	0.08	0.23	0.63	0.08	0.04	0.08	0 00	0.02	0.02
	S.	0 04	0.17	0.16	0 13	0.13	0.04	0.05	0.02	0.08
	S.W.	0.13	0.57	0.88	1.01	0.93	1.35	0.59	0.27	0.45
	W.	1.38	1.35	1.55	2.57	3 50	3 34	3 64	1.99	2.04
	N.W.	0.96	0.46	0.36	1.01	1.32	0.85	1 60	1.81	1.07
	Calm.	3.75	4.81	4 29	3.16	2.56	2.95	2.61	2.62	3.71
	Clear.	2.73	1.29	0.87	1.48	1.45	1.32	1.46	2.71	2.47

TABLE LXXXI.

Relative frequency of the different Upper Currents, excluding the cases when the sky was calm and clear, being the numbers in Table LXXIX., expressed in terms of the means of each corresponding surface wind given in the line marked ‡‡.

		SURFACE WINDS.								
		N.	N E.	E.	S.E.	S.	S.W.	W.	N.W.	CALMS.
Direction from which the clouds were moving.	N.	0.86	0 04	0 04	0.13	0.00	0 09	0 05	0 76	0 09
	N.E.	0.80	0 55	0 11	0.31	0 03	0 00	0 00	0 10	0.13
	E.	0.47	1.72	1 91	0.38	0.06	0.02	0.02	0.09	0 09
	S.E.	0.18	0.47	1 04	0.13	0.06	0 11	0 00	0.03	0 04
	S.	0.09	0 35	0.27	0.19	0.18	0.05	0 06	0 03	0 17
	S W.	0.29	1.17	1.46	1.51	1.24	1.88	0.80	0 46	0.95
	W.	3.13	2.77	2.57	3 84	4 68	4.66	4 91	3.42	4 29
	N.W.	2.18	0.94	0.60	1.51	1.76	1.19	2.16	3 10	2.25

TABLE LXXXII.

Comparative frequency of the several winds on the days in any part of which rain fell during the winter half-year, for the years 1853–57, 1858–62, *and* 1853–1862.

Class I. Light rain not exceeding 0.100 of an inch.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calm.
Absolute duration of each wind in hours.	On days of light rain (1)	1853–1857	170	100	138	207	185	114	71	93	126	179	299	346	298	176	183	237	245
		1858–1862	132	75	136	244	283	117	82	57	75	202	260	350	357	394	203	198	196
		1853–1862	302	175	274	451	468	231	153	150	201	381	559	696	655	570	386	435	441
	On days with and without rain (2)	1853–1857	1310	950	952	1051	1153	584	406	396	624	1046	1789	2500	2309	1850	1661	1758	1400
		1858–1862	1327	955	1062	1311	1455	589	340	353	398	1020	1689	2241	2254	2058	1936	1642	1216
		1853–1862	2637	1905	2014	2362	2608	1173	846	749	1022	2066	3478	4741	4563	3908	3597	3400	2616
Relative duration of each, wind, or ratio of (1) to (2) (3)		1853–1857	.130	.105	.145	.197	.160	.195	.175	.235	.202	.171	.167	.138	.129	.095	.110	.135	.175
		1858–1862	.099	.079	.128	.186	.195	.199	.241	.161	.188	.198	.154	.156	.158	.191	.105	.121	.161
		1853–1862	.114	.092	.136	.191	.179	.197	.205	.200	.197	.184	.161	.146	.143	.146	.107	.128	.169
Ratio of numbers in (3) to their respective means for all winds (4)		1853–1857	0.83	0.67	0.92	1.26	1.02	1.24	1.12	1.50	1.29	1.09	1.07	0.88	0.82	0.61	0.70	0.86	1.12
		1858–1862	0.62	0.49	0.80	1.16	1.22	1.24	1.51	1.01	1.18	1.24	0.96	0.97	0.99	1.19	0.66	0.76	1.01
		1853–1862	0.72	0.58	0.86	1.21	1.13	1.24	1.29	1.26	1.24	1.16	1.02	0.92	0.90	0.92	0.68	0.81	1.07

Class II. Moderate rain (more than 0.100 and less than 0.500 of an inch).

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S. W.	W.S.W.	W.	W.N.W	N.W.	N.N.W.	Calm.
Absolute duration of each wind in hours.	On days of moderate rain (1)	1853–1857	40	75	94	241	320	98	78	72	99	107	126	121	97	91	71	49	106
		1858–1862	89	76	106	311	363	135	66	72	66	157	186	171	78	42	82	70	140
		1853–1862	129	151	200	552	683	233	144	144	165	264	312	292	175	133	153	119	246
	On days with and without rain, (2)	1853–1857	1310	950	952	1051	1153	584	406	396	624	1046	1789	2500	2309	1850	1661	1758	1400
		1858–1862	1327	955	1062	1311	1455	589	340	353	398	1020	1689	2241	2254	2058	1936	1642	1216
		1853–1862	2637	1905	2014	2362	2608	1173	746	749	1022	2066	3478	4741	4563	3908	3597	3401	2616
Relative duration of each wind or ratio of (1) to (2) (3)		1853–1857	.031	.079	.099	.229	.278	.168	.192	.182	.158	.102	.070	.048	.042	.049	.043	.028	.076
		1858–1862	.067	.080	.100	.237	.249	.229	.194	.204	.166	.154	.110	.076	.035	.020	.042	.043	.115
		1853–1862	.049	.079	.099	.234	.262	.199	.193	.192	.161	.128	.090	.062	.038	.034	.043	.035	.094
Ratio of numbers in (3) to their respective means for all winds (4)		1853–1857	0.28	0.72	0.90	2.08	2.52	1.52	1.74	1.65	1.43	0.92	0.64	0.43	0.38	0.44	0.39	0.25	0.69
		1858–1 62	0.54	0.64	0.80	1.90	2.00	1.84	1.55	1.64	1.33	1.23	0.88	0.61	0.28	0.16	0.34	0.34	0.92
		1853–1862	0.42	0.67	0.85	2.00	2.24	1.70	1.65	1.64	1.37	1.09	0.77	0.53	0.32	0.29	0.37	0.30	0.80

CLASS III. Rain 0.500 of an inch and upwards.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of heavy rain. (1)	1853–1857	3	11	19	96	136	54	21	16	12	26	35	27	14	11	5	5	25
		1858–1862	37	38	46	154	151	29	7	11	7	13	15	30	23	12	12	17	9
		1853–1862	40	49	65	250	287	83	28	27	19	39	50	57	37	23	17	22	34
	On days with and without rain. (2)	1853–1857	1310	950	952	10[illegible]	[illegible]153	584	406	396	624	1046	1789	2500	2309	1850	1661	1758	1400
		1858–1862	1327	955	1062	131[illegible]	1455	589	340	353	398	1020	1689	2241	2254	2058	1936	1642	1216
		1853–1862	2637	1905	2014	2362	2608	1173	746	749	1022	2066	3478	4741	4563	3908	3597	3400	2616
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.002	.012	.020	.091	.118	.092	.052	.040	.019	.025	.020	.011	.006	.006	.003	.003	.018
		1858–1862	.028	.040	.043	.117	.104	.049	.021	.031	.018	.013	.009	.013	.010	.006	.006	.010	.007
		1853–1862	.015	.026	.032	.106	.110	.071	.038	.036	.019	.019	.014	.012	.008	.006	.005	.006	.013
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.06	0.38	0.63	2.87	3.73	2.91	1.64	1.26	0.60	0.79	0.63	0.35	0.19	0.19	0.10	0.09	0.57
		1858–1862	0.91	1.30	1.39	3.79	3.37	1.59	0.68	1.00	0.58	0.42	0.29	0.42	0.32	0.19	0.19	0.32	0.23
		1853–1862	0.48	0.82	1.01	3 35	3.48	2.25	1.20	1.14	0.60	0.60	0.44	0.38	0.29	0.19	0.16	0.19	0.41

Rain without reference to amount.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of rain. (1)	1853–1857	213	186	251	544	641	266	170	181	237	312	460	494	409	278	259	291	376
		1858–1862	258	189	288	709	797	281	155	140	148	372	461	551	458	448	297	285	345
		1853–1862	471	375	539	1253	1438	547	325	321	385	684	921	1045	867	726	556	576	721
	On days with and without rain. (2)	1853–1857	1310	950	952	1051	1153	584	406	396	624	1046	1789	2500	2309	1850	1661	1758	1400
		1858–1862	1327	955	1062	1311	1455	589	340	353	398	1020	1689	2241	2254	2058	1936	1642	1216
		1853–1862	2637	1905	2014	2362	2608	1173	746	749	1022	2066	3478	4741	4563	3908	3597	3400	2616
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.163	.196	.264	.518	.556	.455	.419	.457	.380	.298	.257	.198	.177	.150	.156	.166	.269
		1858–1862	.194	.198	.271	.541	.548	.477	.456	.397	.372	.365	.273	.246	.203	.218	.153	.174	.284
		1853–1862	.179	.197	.268	.530	.551	.466	.436	.429	.377	.331	.265	.220	.190	.186	.155	.169	.276
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.55	0.66	0.88	1.73	1.86	1.52	1.40	1.53	1.27	1.00	0.86	0.66	0.59	0.50	0.52	0.56	0.90
		1858–1862	0.61	0.63	0.86	1.71	1.74	1.51	1.44	1.26	1.18	1.15	0.86	0.78	0.64	0.69	0.48	0.55	0.90
		1853–1862	0.58	0.64	0.87	1.72	1.79	1.52	1.42	1.40	1.23	1.08	0.86	0.72	0.62	0.60	0.50	0.55	0.90

TABLE LXXXIII.

Comparative frequency of the several winds on the days in any part of which rain fell during the summer half-year, for the years 1853–57, 1858–62, *and* 1853–1862.

CLASS I. Light rain not exceeding 0.100 of an inch.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of light rain. (1)	1853–1857	235	156	198	325	396	214	138	139	239	391	290	204	274	264	263	312	359
		1858–1862	280	110	202	347	482	155	100	115	205	421	310	334	372	416	549	428	256
		1853–1862	515	266	400	672	878	369	238	254	444	812	600	538	646	680	812	740	615
	On days with and without rain. (2)	1853–1857	1589	1048	980	1362	1784	1097	822	911	1398	1854	1245	715	889	1202	1434	1905	1575
		1858–1862	1284	825	893	1681	2111	932	611	724	1352	1721	1005	791	1153	1554	1904	2068	1351
		1853–1862	2873	1873	1873	3043	3895	2029	1433	1635	2750	3575	2250	1506	2042	2756	3338	3973	2926
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.148	.149	.202	.239	.222	.195	.168	.153	.171	.211	.233	.285	.308	.220	.183	.164	.228
		1858–1862	.218	.133	.226	.206	.228	.166	.164	.159	.152	.245	.308	.422	.323	.268	.288	.207	.189
		1853–1862	.179	.142	.214	.221	.225	.182	.166	.155	.161	.227	.267	.357	.316	.247	.243	.186	.210
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.72	0.73	0.99	1.17	1.08	0.95	0.82	0.75	0.84	1.03	1.14	1.39	1.51	1.07	0.89	0.80	1.11
		1858–1862	0.95	0.58	0.99	0.90	0.99	0.72	0.71	0.69	0.66	1.07	1.34	1.84	1.41	1.17	1.25	0.90	0.82
		1853–1862	0.82	0.65	0.98	1.02	1.03	0.84	0.76	0.71	0.74	1.04	1.23	1.64	1.45	1.14	1.12	0.85	0.96

CLASS II. Moderate rain (more than 0.100 and less than 0.500 of an inch).

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S. W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of moderate rain. (1)	1853–1857	163	157	183	261	267	162	125	130	220	292	220	135	125	166	191	195	150
		1858–1862	138	81	153	321	307	146	63	78	118	192	172	124	138	158	185	179	139
		1853–1862	301	238	336	582	574	308	188	208	338	484	392	259	263	324	376	374	289
	On days with and without rain. (2)	1853–1857	1589	1048	980	1362	1784	1097	822	911	1398	1854	1245	715	889	1202	1434	1905	1575
		1858–1862	1284	825	893	1681	2111	932	611	724	1352	1721	1005	791	1153	1554	1904	2068	1351
		1853–1862	2873	1873	1873	3043	3895	2029	1433	1635	2750	3575	2250	1506	2042	2756	3338	3973	2926
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.102	.150	.187	.192	.150	.148	.152	.143	.157	.157	.177	.189	.141	.138	.133	.102	.095
		1858–1862	.108	.098	.171	.191	.145	.157	.103	.108	.087	.112	.171	.157	.120	.102	.097	.087	.103
		1853–1862	.105	.127	.179	.191	.147	.152	.131	.127	.123	.135	.174	.172	.129	.118	.113	.094	.099
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.69	1.01	1.27	1.30	1.01	1.00	1.03	0.97	1.06	1.06	1.20	1.28	0.95	0.93	0.90	0.69	0.64
		1858–1862	0.87	0.79	1.37	1.53	1.16	1.26	0.83	0.87	0.70	0.90	1.37	1.26	0.96	0.82	0.78	0.70	0.83
		1853–1862	0.77	0.93	1.31	1.40	1.08	1.12	0.96	0.93	0.90	0.99	1.28	1.26	0.95	0.87	0.83	0.69	0.73

CLASS III. Rain 0.500 of an inch and upwards.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of heavy rain. (1)	1853–1857	99	48	112	165	218	102	47	72	59	107	89	19	40	69	64	73	64
		1858–1862	62	60	83	284	220	59	50	22	49	111	115	46	52	49	47	69	35
		1853–1862	152	108	195	449	438	161	97	94	108	218	204	65	92	118	111	142	99
	On days with and without rain. (2)	1853–1857	1589	1048	980	1362	1784	1097	822	911	1398	1854	1245	715	889	1202	1434	1905	1575
		1858–1862	1284	825	893	1681	2111	932	611	724	1352	1721	1005	791	1153	1554	1904	2068	1351
		1853–1862	2873	1873	1873	3043	3895	2029	1433	1635	2750	3575	2250	1506	2042	2756	3338	3973	2926
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.057	.046	.114	.121	.122	.093	.057	.079	.042	.058	.071	.027	.045	.057	.045	.038	.041
		1858–1862	.048	.073	.093	.169	.104	.063	.082	.030	.036	.064	.114	.058	.045	.032	.025	.033	.026
		1853–1862	.053	.058	.104	.148	.112	.079	.068	.058	.039	.061	.091	.043	.045	.043	.033	.036	.034
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.87	0.70	1.74	1.85	1.86	1.42	0.87	1.21	0.64	0.89	1.08	0.41	0.69	0.87	0.69	0.58	0.63
		1858–1862	0.75	1.13	1.44	2.62	1.61	0.98	1.27	0.47	0.56	0.99	1.77	0.90	0.70	0.50	0.39	0.51	0.40
		1853–1862	0.82	0.89	1.60	2.28	1.72	1.21	1.05	0.89	0.60	0.94	1.40	0.66	0.69	0.66	0.51	0.55	0.52

Rain without reference to amount.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of rain. (1)	1853–1857	488	361	493	751	881	478	310	341	518	790	599	358	439	499	518	580	573
		1858–1862	480	251	438	952	1009	360	213	215	372	724	597	504	562	623	781	676	430
		1853–1862	968	612	931	1703	1890	838	523	556	890	1514	1196	862	1001	1122	1299	1256	1003
	On days with and without rain. (2)	1853–1857	1589	1048	980	1362	1784	1097	822	911	1398	1854	1245	715	889	1202	1434	1905	1575
		1858–1862	1284	825	893	1681	2111	932	611	724	1352	1721	1005	791	1153	1554	1904	2068	1351
		1853–1862	2873	1873	1873	3043	3895	2029	1433	1635	2750	3575	2250	1506	2042	2756	3338	3973	2926
Relative duration of each wind, or ratios of (1) to (2). (3		1853–1857	.306	.344	.503	.551	.494	.436	.377	.374	.371	.426	.481	.501	.494	.415	.361	.304	.364
		1858–1862	.374	.304	.490	.566	.478	.386	.349	.297	.275	.421	.594	.637	.487	.401	.410	.327	.318
		1853–1862	.337	.327	.497	.560	.485	.413	.365	.340	.324	.423	.532	.572	.490	.407	.389	.316	.343
Ratios of the numbers in (3) to their respective means for all winds.		1853–1857	0.73	0.82	1.20	1.32	1.18	1.04	0.90	0.89	0.89	1.02	1.15	1.20	1.18	0.99	0.86	0.73	0.87
		1858–1862	0.89	0.73	1.17	1.35	1.14	0.92	0.83	0.71	0.66	1.01	1.42	1.52	1.16	0.96	0.98	0.78	0.76
		1853–1862	0.81	0.78	1.19	1.34	1.16	0.99	0.87	0.81	0.77	1.01	1.27	1.37	1.17	0.97	0.93	0.75	0.82

TABLE LXXXIV.

Comparative frequency of the several winds on the days in any part of which rain fell during the year, for the years 1853–1857, 1858–62, *and* 1853–1862.

CLASS I. Light rain not exceeding 0.100 of an inch.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of light rain. (1)	1853–1857	405	256	336	532	581	328	209	232	365	570	589	550	572	440	446	549	604
		1858–1862	412	185	338	591	765	272	182	172	280	623	570	684	729	810	752	626	452
		1853–1862	817	441	674	1123	1346	600	391	404	645	1193	1159	1234	1301	1250	1198	1175	1056
	On days with and without rain. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7373	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.140	.128	.174	.220	.198	.195	.170	.178	.181	.197	.194	.171	.179	.144	.144	.150	.203
		1858–1862	.158	.104	.173	.198	.215	.179	.191	.160	.160	.227	.212	.226	.214	.224	.196	.169	.176
		1853–1862	.148	.117	.173	.208	.267	.187	.179	.169	.171	.211	.202	.198	.197	.188	.173	.159	.191
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.80	0.73	1.00	1.26	1.14	1.12	0.97	1.02	1.04	1.13	1.11	0.98	1.03	0.83	0.82	0.86	1.16
		1858–1862	0.84	0.56	0.93	1.05	1.15	0.96	1.02	0.85	0.86	1.21	1.13	1.21	1.14	1.20	1.05	0 90	0.94
		1853–1862	0.82	0.65	0.96	1.15	1.14	1.03	0.99	0.93	0.94	1.17	1.12	1.09	1.09	1.04	0.95	0.88	1.05

CLASS II. Moderate rain (more than 0.100 and less than 0.500 of an inch.)

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of moderate rain. (1)	1853–1857	203	232	277	502	587	260	203	202	319	399	346	256	222	257	262	244	256
		1858–1862	227	157	259	632	670	281	129	150	184	349	358	295	216	200	267	249	279
		1853–1862	430	389	536	1134	1257	541	332	352	503	748	704	551	438	457	529	493	535
	On days with and without rain. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7373	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.070	.116	.143	.208	.200	.155	.165	.154	.158	.138	.114	.080	.069	.084	.085	.067	.086
		1858–1862	.087	.088	.132	.211	.188	.185	.136	.139	.105	.127	.133	.097	.063	.055	.070	.067	.109
		1853–1862	.078	.103	.138	.210	.193	.169	.152	.148	.133	.133	.123	.088	.066	.069	.076	.067	.097
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.57	0.94	1.16	1.69	1.62	1.26	1.34	1.25	1.28	1.12	0.93	0.65	0.56	0.68	0.69	0.54	0.70
		1858–1862	0.74	0.75	1.13	1.80	1.60	1.58	1.16	1.19	0.90	1.08	1.14	0.83	0.54	0.47	0.60	0.57	0.93
		1853–1862	0.65	0.86	1.15	1.75	1.61	1.41	1.26	1.23	1.11	1.11	1.02	0.73	0.55	0.57	0.63	0.56	0.81

CLASS III. Rain 0.500 of an inch and upwards.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W	Calms
Absolute duration of each wind in hours.	On days of heavy rain. (1)	1853–1857	93	59	131	261	354	156	68	88	71	133	124	46	54	80	69	78	89
		1858–1862	99	98	129	438	371	88	57	33	56	124	130	76	75	61	59	86	44
		1853–1862	192	157	260	699	725	244	125	121	127	257	254	122	129	141	128	164	133
	On days with and without rain. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7373	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.032	.030	.068	.108	.121	.093	.055	.067	.035	.046	.041	.014	.017	.026	.022	.021	.030
		1858–1862	.038	.055	.066	.146	.104	.058	.060	.031	.032	.045	.048	.025	.022	.017	.015	.023	.017
		1853–1862	.035	.042	.067	.129	.112	.076	.057	.051	.034	.046	.044	.019	.020	.021	.018	.022	.024
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.66	0.62	1.40	2.22	2.49	1.91	1.13	1.38	0.72	0.95	0.84	0.29	0.35	0.54	0.45	0.43	0.62
		1858–1862	0.81	1.17	1.40	3.09	2.20	1.23	1.27	0.66	0.68	0.95	1.02	0.53	0.47	0.36	0.32	0.49	0.36
		1853–1862	0.73	0.87	1.39	2.68	2.33	1.58	1.19	1.06	0.71	0.96	0.92	0.40	0.42	0.44	0.37	0.46	0.50

Rain without reference to amount.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of rain. (1)	1853–1857	701	547	744	1295	1522	744	480	522	755	1102	1059	852	848	777	777	871	949
		1858–1862	738	440	726	1661	1806	641	368	355	520	1096	1058	1055	1020	1071	1078	961	775
		1853–1862	1439	987	1470	2956	3328	1385	848	877	1275	2198	2117	1907	1868	1848	1855	1832	1724
	On days with and without rain. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1868–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7373	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.242	.274	.385	.537	.518	.443	.391	.399	.373	.380	.349	.265	.265	.255	.251	.238	.319
		1858–1862	.283	.247	.371	.535	.506	.421	.387	.330	.297	.400	.393	.348	.299	.296	.281	.259	.302
		1853–1862	.261	.261	.378	.547	.512	.432	.389	.368	.338	.390	.370	.305	.283	.277	.267	.248	.311
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	0.70	0.79	1.11	1.55	1.50	1.28	1.13	1.15	1.08	1.10	1.01	0.77	0.77	0.74	0.72	0.69	0.92
		1858–1862	0.81	0.70	1.06	1.58	1.44	1.20	1.10	0.94	0.84	1.14	1.12	0.99	0.85	0.84	0.80	0.74	0.86
		1853–1862	0.75	0.75	1.08	1.57	1.47	1.24	1.11	1.05	0.97	1.12	1.06	0.87	0.81	0.79	0.76	0.71	0.89

TABLE LXXXV.

Comparative frequency of the several winds on the days in any part of which snow fell during the year, for the years 1853–57, 1858–62, *and* 1853–62.

CLASS I. Light snow not exceeding one inch.

			N.	N.N.E	N.E	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of light snow. (1)	1853–1857	464	299	274	151	168	169	105	84	120	168	486	806	835	614	586	622	290
		1858–1862	471	275	183	227	230	103	69	105	111	211	388	862	959	947	724	644	252
		1853–1862	935	574	457	378	398	272	174	189	231	379	874	1668	1794	1561	1310	1266	542
	On days with and without snow. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7375	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.160	.150	.142	.063	.057	.101	.086	.064	.059	.058	.160	.251	.261	.201	[illegible]	.170	.097
		1858–1862	.180	.154	.094	.076	.064	.068	.073	.097	.063	.077	.144	.284	.281	.26	.189	.174	.098
		1853–1862	.170	.152	.118	.070	.061	.085	.080	.079	.061	.067	.153	.266	.272	.234	.189	.172	.098
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	1.20	1.12	1.06	0.47	0.43	0.76	0.64	0.48	0.44	0.43	1.20	1.88	1.96	1.51	1.42	1.27	0.73
		1858–1862	1.29	1.10	0.67	0.54	0.46	0.49	0.52	0.69	0.45	0.55	1.03	2.03	2.01	1.87	1.35	1.24	0.70
		1853–1862	1.24	1.11	0.86	0.51	0.45	0.62	0.58	0.58	0.45	0.49	1.12	1.94	1.99	1.71	1.38	1.26	0.72

CLASS II. Moderate snow, more than one inch and less than five inches.

			N.	N.N.E	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of moderate snow. (1)	1853–1857	143	170	203	121	126	77	74	34	56	87	135	135	145	112	103	214	68
		1858–1862	124	150	296	212	198	58	27	50	36	52	70	104	152	76	123	138	77
		1853–1862	267	220	499	333	324	135	101	84	92	139	205	239	297	188	226	352	145
	On days with and without snow. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7375	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	049	.085	105	.050	.043	.046	.069	.026	.028	030	.045	.042	.045	037	.033	.058	.023
		1858–1862	.048	.084	.151	.071	.056	038	028	.046	.021	019	.026	.034	.045	.021	.032	.037	.030
		1853–1862	.048	085	.128	.062	.050	.042	.046	.035	024	.025	.036	.038	.045	.028	.033	048	026
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	1.04	1.79	2.22	1.06	0.91	0.97	1.27	0.55	0.59	0.63	0.95	0.89	0.95	0.78	0.70	1.22	0.49
		1858–1862	1.04	1.82	3.26	1.53	1.21	0.82	0.60	0.99	0.45	0.41	0.56	0.73	0.97	0.45	0.69	0.80	0.65
		1853–1862	1.02	1.81	2.72	1.32	1.06	0.89	0.98	0.75	0.51	0.53	0.77	0.81	0.96	0.60	0.70	1.02	0.55

CLASS III. Heavy Snow, five inches and upwards.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of heavy snow. (1)	1853–1857	38	44	44	42	63	19	2	1	3	5	6	14	10	12	13	22	7
		1858–1862	21	21	37	52	62	6	3	3	0	6	17	15	15	8	18	19	9
		1853–1862	59	65	81	94	125	25	5	4	3	11	23	29	25	20	31	41	16
	On days with and without snow. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7375	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.013	0.22	.023	.017	.021	.011	.002	.001	.001	.002	.002	.004	.004	.004	.004	.006	.002
		1858–1862	.008	0.12	.019	.017	.017	.004	.003	.003	.000	.002	.006	.005	.004	.002	.005	.005	.004
		1853–1862	.011	0.17	.021	.017	.019	.008	.002	.002	.001	.002	.004	.005	.004	.003	.005	.006	.003
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	1.59	2.69	2.81	2.08	2.57	1.34	0.25	0.12	0.12	0.24	0.25	0.49	0.49	0.49	0.49	0.73	0.24
		1858–1862	1.17	1.76	2.78	2.49	2.49	0.59	0.44	0.44	0.00	0.29	0.88	0.73	0.59	0.29	0.73	0.73	0.59
		1853–1862	1.44	2.22	2.75	2.22	2.49	1.05	0.26	0.26	0.13	0.26	0.52	0.65	0.52	0.39	0.65	0.78	0.59

Snow without reference to amount.

			N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
Absolute duration of each wind in hours.	On days of snow. (1)	1853–1857	645	513	521	314	357	265	181	119	179	260	627	955	990	738	702	858	365
		1858–1862	616	446	516	491	490	167	99	158	147	269	475	981	1126	1031	865	801	338
		1853–1862	1261	959	1037	805	847	432	280	277	326	529	1102	1936	2116	1769	1567	1659	703
	On days with and without snow. (2)	1853–1857	2899	1998	1932	2413	2937	1681	1228	1307	2022	2900	3034	3215	3198	3052	3095	3663	2975
		1858–1862	2611	1780	1955	2992	3566	1521	951	1077	1750	2741	2694	3032	3407	3612	3840	3710	2567
		1853–1862	5510	3778	3887	5405	6503	3202	2179	2384	3772	5641	5728	6247	6605	6664	6935	7375	5542
Relative duration of each wind, or ratios of (1) to (2). (3)		1853–1857	.222	.257	.270	.130	.122	.158	.147	.091	.089	.090	.207	.298	.310	.242	.227	.234	.123
		1858–1862	.236	.251	.264	.164	.137	.110	.104	.147	.084	.098	.176	.324	.330	.285	.225	.216	.132
		1853–1862	.229	.254	.267	.149	.130	.135	.128	.116	.086	.094	.192	.310	.320	.265	.226	.225	.127
Ratios of the numbers in (3) to their respective means for all winds. (4)		1853–1857	1.17	1.36	1.43	0.69	0.64	0.84	0.78	0.48	0.47	0.48	1.09	1.57	1.64	1.28	1.20	1.24	0.65
		1858–1862	1.22	1.30	1.37	0.85	0.71	0.57	0.54	0.76	0.43	0.51	0.91	1.68	1.71	1.48	1.17	1.12	0.68
		1853–1862	1.20	1.33	1.40	0.78	0.68	0.71	0.67	0.61	0.45	0.49	1.00	1.62	1.67	1.38	1.18	1.18	0.66

TABLE LXXXVI.

Synopsis of the Final Ratios given in Tables LXXXI. to LXXXV., corresponding to the different classes of Rain and Snow.

Rain in the Winter Half-year.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
1853–57.	Class I.	0.83	0.67	0.92	1.26	1.02	1.24	1.12	1.50	1.29	1.09	1.07	0.88	0.82	0.61	0.70	0.86	1.12
	" II.	0.28	0.72	0.90	2.08	2.52	1.52	1.74	1.65	1.43	0.93	0.63	0.44	0.38	0.44	0.39	0.25	0.69
	" III.	0.06	0.38	0.63	2.88	3.73	2.91	1.64	1.26	0.60	0.79	0.63	0.35	0.19	0.19	0.10	0.09	0.57
	Rain generally	0.55	0.66	0.88	1.73	1.86	1.52	1.40	1.53	1.27	1.00	0.86	0.66	0.59	0.50	0.52	0.56	0.90
1858–62.	Class I.	0.62	0.49	0.80	1.16	1.22	1.24	1.51	1.01	1.17	1.24	0.96	0.98	0.99	1.19	0.66	0.76	1.01
	" II.	0.54	0.64	0.80	1.90	2.00	1.84	1.55	1.63	1.33	1.23	0.88	0.61	0.28	0.16	0.34	0.34	0.92
	" III.	0.91	1.30	1.39	3.79	3.37	1.59	0.68	1.00	0.58	0.42	0.29	0.42	0.32	0.19	0.19	0.32	0.23
	Rain generally	0.61	0.63	0.86	1.71	1.74	1.51	1.44	1.26	1.18	1.15	0.86	0.78	0.64	0.69	0.48	0.55	0.90
1853–62.	Class I.	0.72	0.58	0.86	1.20	1.13	1.24	1.29	1.26	1.24	1.16	1.02	0.92	0.90	0.92	0.67	0.81	1.07
	" II.	0.42	0.67	0.84	2.00	2.24	1.70	1.65	1.64	1.37	1.09	0.77	0.53	0.32	0.29	0.37	0.30	0.80
	" III.	0.48	0.82	1.01	3.36	3.48	2.25	1.20	1.14	0.60	0.60	0.44	0.38	0.29	0.19	0.16	0.19	0.41
	Rain generally	0.58	0.64	0.87	1.72	1.79	1.52	1.42	1.40	1.23	1.08	0.86	0.72	0.62	0.61	0.50	0.55	0.90

Rain in the Summer Half-year.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
1853–57.	Class I.	0.72	0.73	0.99	1.17	1.08	0.95	0.82	0.75	0.84	1.03	1.14	1.39	1.50	1.08	0.89	0.80	1.11
	" II.	0.69	1.01	1.27	1.30	1.01	1.00	1.03	0.97	1.06	1.06	1.20	1.28	0.95	0.93	0.90	0.69	0.64
	" III.	0.87	0.70	1.74	1.85	1.86	1.42	0.87	1.21	0.64	0.89	1.08	0.41	0.69	0.87	0.69	0.58	0.63
	Rain generally	0.73	0.82	1.20	1.32	1.18	1.04	0.90	0.90	0.89	1.02	1.15	1.20	1.18	0.99	0.86	0.73	0.87
1858–62.	Class I.	0.95	0.58	0.98	0.90	0.99	0.72	0.71	0.69	0.66	1.97	1.34	1.84	1.41	1.17	1.25	0.90	0.82
	" II.	0.87	0.79	1.37	1.53	1.16	1.26	0.83	0.87	0.70	0.90	1.37	1.26	0.96	0.82	0.78	0.70	0.83
	" III.	0.75	1.13	1.44	2.62	1.61	0.98	1.27	0.47	0.56	0.99	1.77	0.90	0.70	0.50	0.39	0.51	0.40
	Rain generally	0.89	0.73	1.17	1.35	1.14	0.92	0.83	0.71	0.66	1.01	1.42	1.52	1.16	0.96	0.98	0.78	0.76
1853–62.	Class I.	0.82	0.65	0.98	1.02	1.03	0.84	0.76	0.71	0.74	1.04	1.23	1.64	1.45	1.13	1.12	0.86	0.96
	" II.	0.77	0.93	1.31	1.40	1.08	1.12	0.96	0.93	0.90	0.99	1.28	1.26	0.95	0.87	0.83	0.69	0.73
	" III.	0.82	0.89	1.60	2.28	1.72	1.21	1.05	0.89	0.60	0.94	1.40	0.66	0.69	0.66	0.51	0.55	0.52
	Rain generally	0.81	0.78	1.19	1.34	1.16	0.99	0.87	0.81	0.67	1.01	1.27	1.37	1.17	0.97	0.93	0.75	0.82

Rain in the whole year.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
1853-57.	Class I.	0.80	0.73	1.00	1.26	1.14	1.12	0.97	1.02	1.04	1.13	1.11	0.98	1.03	0.82	0.83	0.86	1.16
	" II.	0.57	0.94	1.16	1.69	1.63	1.26	1.34	1.25	1.28	1.12	0.93	0.65	0.56	0.68	0.69	0.54	0.70
	" III.	0.66	0.62	1.40	2.22	2.49	1.91	1.13	1.38	0.72	0.95	0.84	0.29	0.35	0.54	0.45	0.43	0.62
	Rain generally	0.70	0.79	1.11	1.55	1.50	1.28	1.13	1.15	1.08	1.10	1.01	0.77	0.77	0.74	0.72	0.69	0.92
1858-62.	Class I.	0.84	0.56	0.93	1.05	1.15	0.96	1.02	0.85	0.86	1.21	1.13	1.21	1.14	1.20	1.05	0.90	0.94
	" II.	0.74	0.75	1.13	1.80	1.60	1.58	1.16	1.19	0.90	1.08	1.14	0.83	0.54	0.47	0.60	0.57	0.93
	" III.	0.81	1.17	1.40	3.09	2.20	1.23	1.27	0.66	0.68	0.95	1.02	0.53	0.47	0.36	0.32	0.49	0.36
	Rain generally	0.81	0.70	1.06	1.58	1.44	1.20	1.10	0.94	0.84	1.14	1.12	0.99	0.85	0.84	0.80	0.74	0.86
1853-62.	Class I.	0.82	0.65	0.96	1.15	1.14	1.03	0.99	0.93	0.94	1.17	1.12	1.09	1.09	1.04	0.95	0.88	1.06
	" II.	0.65	0.86	1.15	1.75	1.61	1.41	1.27	1.23	1.11	1.11	1.02	0.73	0.55	0.57	0.63	0.56	0.81
	" III.	0.73	0.87	1.39	2.68	2.33	1.58	1.19	1.06	0.71	0.98	0.92	0.40	0.42	0.44	0.37	0.46	0.50
	Rain generally	0.75	0.75	1.08	1.57	1.47	1.24	1.11	1.05	0.97	1.12	1.06	0.87	0.81	0.79	0.76	0.71	0.89

Snow.

		N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	Calms.
1853-57.	Class I.	1.20	1.12	1.06	0.47	0.43	0.76	0.64	0.48	0.44	0.44	1.20	1.88	1.96	1.51	1.42	1.27	0.73
	" II.	1.04	1.79	2.22	1.06	0.91	0.97	1.27	0.55	0.59	0.63	0.95	0.89	0.95	0.78	0.70	1.22	0.49
	" III.	1.59	2.69	2.81	2·08	2.57	1.34	0.25	0.12	0.12	0.24	0.25	0.49	0.49	0.49	0.49	0.73	0.25
	Snow generally	1.17	1.36	1.43	0.69	0.65	0.83	0.78	0.48	0.47	0.48	1.09	1.58	1.64	1.28	1.20	0.24	0.65
1858-62.	Class I.	1.29	1.10	0.67	0.54	0.46	0.49	0.52	0.69	0.45	0.55	1.03	2.03	2.01	1.87	1.35	1.24	0.70
	" II.	1.04	1.82	3.26	1.53	1.21	0.82	0.60	0.99	0.45	0.41	0.56	0.73	0.97	0.45	0.69	0.80	0.65
	" III.	1.17	1.76	2.78	2.49	2.49	0.59	0.44	0.44	0.00	0.29	0.88	0.73	0.59	0.29	0.73	0.73	0.59
	Snow generally	1.22	1.30	1.37	0.85	0.71	0.57	0.54	0.76	0.44	0.51	0.91	1.68	1.71	1.48	1.16	1.12	0.68
1853-62.	Class I.	1.24	1.11	0.86	0.51	0.45	0.62	0.58	0.58	0.45	0.49	1.12	1.94	1.99	1.71	1.38	1.26	0.72
	" II.	1.02	1.81	2.72	1.32	1.06	0.89	0.98	0.75	0.51	0.53	0.77	0.81	0.96	0.60	0.70	1.02	0.55
	" III.	1.44	2.22	2.75	2.22	2.48	1.05	0.26	0.26	0.13	0.26	0.52	0.65	0.52	0.39	0.65	0.78	0.39
	Snow generally	1.20	1.33	1.40	0.78	0.68	0.71	0.67	0.61	0.45	0.49	1.00	1.62	1.67	1.39	1.18	1.18	0.66

TABLE LXXXVII.

Number of days in which rain fell with its depth in inches, for each month of the years 1860, 1861, *and* 1862.

Number of days.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	6	7	5	11	16	14	13	14	14	15	12	3	130
1861	4	4	8	12	12	13	16	15	17	15	14	6	136
1862	5	3	8	10	8	10	15	15	9	19	11	5	118
Means for the 3 years.	5	5	7	11	12	12	15	15	13	16	12	5	128
Means for 23 years...	5	4	6	9	11	12	10	10	11	12	10	5	106

Depth in inches.

1860	0.740	1.330	0.882	1.282	1.815	2.136	4.336	3.405	1.959	1.618	2.569	1.362	23.434
1861	0.685	0.815	2.125	1.619	3.380	2.329	2.635	2.953	3.607	1.993	4.294	0.560	26.995
1862	0.115	0.180	2.560	2.235	1.427	1.007	5.344	3.483	2.344	2.684	2.205	1.945	25.529
Means for the 3 years.	0.513	0.775	1.856	1.712	2.207	1.824	4.105	3.280	2.637	2.098	3.023	1.289	25.319
Means for 21 years...	1.269	1.034	1.553	2.390	3.084	2.961	3.672	3.034	3.788	2.529	3.192	1.637	30.143

TABLE LXXXVIII.

Number of days in which snow fell with its depth in inches, for each month of the years 1860, 1861, *and* 1862.

Number of days.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1860	16	13	11	5	...	...	...	...	...	1	8	21	75
1861	23	17	14	4	1	...	...	...	...	1	8	8	76
1862	19	17	11	4	...	...	...	...	...	2	11	8	72
Means for the 3 years.	19	16	12	4	0	0	0	0	0	1	9	12	74
Means for 23 years ...	12	12	9	3	0	0	0	0	0	2	6	13	58

Depth in inches.

1860	8.7	18.8	2.4	0.3	...	...	...	...	...	*	1.9	13.5	45.6
1861	20.6	29.7	7.1	6.9	0.5	...	...	...	...	*	3.2	6.8	74.8
1862	27.4	23.1	18.5	0.2	...	...	...	...	...	0.5	5.3	10.4	85.4
Means for the 3 years.	18.9	23.9	9.3	2.5	0.2	...	...	...	...	0.2	3.5	10.9	68.6
Means for 20 years...	14.3	18.3	9.3	2.4	0.1	...	...	...	...	0.8	3.2	14.5	62.8

* Inappreciable.

TABLE LXXXIX.

Mean monthly and annual temperatures in each of the twenty-three years, from 1841 *to* 1863 *inclusive, with the average monthly and annual temperatures in the whole period. Also the probable variability of a single year, and of each month in a single year, together with the probable errors of the monthly and annual averages for the whole period.*

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean Annual Temperatures.	Differences from Average.
1841	25°.6	22°.4	27°.7	39°.2	50°.5	65°.6	65°.0	64°.4	61°.3	41°.6	35°.0	28°.7	43°.92	−0°.26
1842	27.9	26.9	35.8	43.1	49.1	55.6	64.7	65.7	55.7	45.1	33.3	24.7	43.96	−0.22
1843	28.7	14.5	21.3	40.9	49.1	58.4	64.5	66.4	59.1	41.8	33.5	30.0	42.35	−1.83
1844	20.2	26.0	31.3	47.5	53.6	59.9	66.0	64.3	58.6	43.3	34.9	28.2	44.48	+0.30
1845	26.5	26.0	35.4	42.1	49.6	61.0	66.2	67.9	56.0	46.4	36.8	21.1	44.58	+0.40
1846	26.7	20.4	33.1	44.0	55.5	63.3	68.0	68.4	63.6	44.6	41.3	27.5	46.36	+2.18
1847	23 3	21.5	26 2	39.2	54.4	58.4	68.0	65.1	55.6	44.0	38.6	30.1	43.70	−0.48
1848	28.7	26.6	28.6	41.3	54.1	62.9	65.5	69.2	54.2	46.3	34.5	29.1	45.08	+0.90
1849	18.5	19.5	33.5	39.0	48.0	63.2	68.4	66.3	58.2	45.3	42.6	26.5	44.09	−0.09
1850	29.7	26.0	29.8	37.9	47.6	64.3	68.9	66.8	56.5	45.4	38.8	21.7	44.45	+0.27
1851	25.5	27.6	32.4	41.3	51.3	59.2	65.0	63.6	60.0	47.4	32.9	21.5	43.98	−0.20
1852	18.4	23.4	27.7	38.2	51.4	60.8	66.8	65.9	57.5	48.0	36.0	31.9	43.84	−0.34
1853	22.9	24.2	30.8	41.9	50.8	65.4	65.5	68.7	58.9	44.5	38.7	25.4	44.80	+0.62
1854	23.5	21.2	30.8	41.1	52.1	64.1	72.4	68.1	61.1	49.5	36.9	21.9	45.23	+1.05
1855	25.9	15.6	28.6	42.5	53.0	59.9	67.9	64.1	59.6	45.4	38.6	26.9	43.98	−0.20
1856	16.0	15.8	23.2	42.3	50.4	62.1	69.8	63.6	57.2	45.4	37.4	22.9	42.18	−2.00
1857	12.7	28.7	28.0	35.4	48.8	56.9	67.7	65.4	58.7	45.5	33.6	31.9	42.75	−1.43
1858	30.0	17.1	28.6	41.5	48.8	66.1	67.8	67.7	59.2	48.8	34.2	27.4	44.76	+0.58
1859	26.4	26.2	36.5	39.6	55.1	58.2	66.8	66.7	55.2	43.0	38.9	17.9	44.21	+0.03
1860	23.3	23.0	34.6	39.6	55.5	63.1	63.8	64.5	55.4	47.3	38.0	24.0	44.34	+0.16
1861	19.8	26.2	27.1	42.1	47.4	61.2	65.3	65.5	59.1	48.8	37.2	31.2	44.24	+0.06
1862	21.7	22.6	28.9	39.6	52.1	60.5	66.6	67.7	59.7	48.7	35.6	28.8	44.37	+0.19
1863	28.0	22.6	26.0	42.1	54.2	60.1	67.5	66.6	55.9	46.0	39.1	27.0	44.59	+0.41
Means 1841–1863	23°.91	22°.78	29°.82	40°.93	51°.41	61°.31	66°.87	66°.20	58°.10	45°.74	36°.80	26°.35	44°.18	
Normal temperatures, in lat 43° 40′ N.	32°.8	34°.7	40°.1	50°.2	58°.1	64°.6	68°.7	68°.5	61°.5	53°.8	43°.2	36°.0	51°.0	
Probable variabilities in a single year.	3°.10	2°.76	2°.65	1°.64	1°.77	1°.92	1°.33	1°.14	1°.56	1°.48	1°.76	2°.59	0°.61	
Probable errors of general averages.	0°.65	0°.58	0°.55	0°.34	0°.37	0°.40	0°.28	0°.24	0°.33	0°.31	0°.37	0°.54	0°.13	
Means 1841–1852	24°.97	23°.40	30°.23	41°.14	51°.18	61°.05	66°.41	66°.16	58°.02	44°.93	36°.51	26°.75	44°.23	

TABLE XC.

Mean monthly and annual barometric pressures in each of the twenty-three years from 1841 *to* 1863 *inclusive, with the average monthly and annual pressures in the whole period. Also the probable variability in a single year, and of each month in a single year, together with the probable errors of the monthly and annual averages for the whole period.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December	Year.
1841	29.6636	29.4918	29.6540	29.6234	29.5452	29.5428	29.6171	29.6977	29.6035	29.6440	29.5678	29.5970	29.6040
1842	.5091	.5477	.6343	.5551	.5888	.5856	.6567	.7100	.6594	.6397	.6094	.6504	.6122
1843	.5961	.5566	.5580	.5984	.6149	.5520	.6203	.6799	.6911	.5425	.6682	.6659	.6120
1844	.6118	.6604	.6526	.7374	.5496	.6092	.5368	.5289	.7307	.6356	.6110	.5486	.6177
1845	.6244	.5748	.5922	.5991	.6355	.5976	.5082	.6320	.5611	.7941	.5084	.6918	.6099
1846	.6172	.6620	.6026	.7017	.5067	.5939	.5847	.6382	.6237	.6960	.6714	.6424	.6284
1847	.5954	.6202	.6756	.5731	.5837	.5619	.6313	.6360	.6099	.6753	.6851	.6567	.6253
1848	.6657	.6084	.6476	.7310	.4961	.5435	.5715	.6412	.5874	.5999	.6555	.6776	.6188
1849	.8046	.7529	.7133	.5814	.6717	.6238	.6825	.6194	.6820	.6038	.5886	.6799	.6670
1850	.6869	.4945	.6004	.5653	.5551	.6409	.5878	.6006	.6233	.5977	.6565	.6756	.6154
1851	.6106	.7562	.6570	.5991	.6288	.6003	.5537	.6691	.7586	.5998	.6347	.6668	.6446
1852	.5756	.5281	.5916	.4147	.6187	.5203	.6104	.6658	.7013	.6613	.5761	.5995	.5886
1853	.7159	.5856	.5551	.5672	.5965	.6155	.6538	.5894	.6419	.6509	.7948	.6001	.6306
1854	.6105	.6979	.5264	.6362	.5647	.5494	.6389	.6464	.7006	.6979	.4419	.5890	.6083
1855	.6433	.6280	.5147	.6522	.6499	.5114	.6097	.6517	.7209	.5538	.6670	.7037	.6255
1856	.6734	.4915	.5610	.5773	.5808	.5464	.5898	.5195	.5999	.7093	.6448	.7130	.6006
1857	.7400	.7393	.5975	.5283	.5339	.4247	.5869	.5930	.7118	.6695	.5265	.6205	6060
1858	.6791	.6635	.6215	.4970	.5824	.6037	.6038	.6181	.6497	.6837	.6294	.6960	.6273
1859	.6808	.6353	.4143	.5333	.6584	.6176	.6469	.5977	.6684	.6170	.6773	.7109	.6215
1860	.6467	.6356	.5129	.5758	.5645	.4958	.5626	.5812	.6731	.6735	.5253	.6683	.5929
1861	.6555	.5473	.6224	.5623	.5440	.5678	.5491	.6517	.6082	.6215	.5398	.7478	.6015
1862	7312	.6109	.5054	.7241	.5881	.5622	.5460	.6148	.6828	.6212	.6391	.6795	.6254
1863	.6504	.7954	.6667	.6436	.6156	.5503	.5949	.6440	.7322	.6996	.5584	.6992	.6542
Means 1841–1863.	.6516	.6254	.5947	.5990	.5858	.5659	.5975	.6272	.6618	.6473	.6120	.6600	.6190
Probable variabilities in a single year.	0.0418	0.0562	0.0466	0.0520	0.0314	0.0331	0.0292	0.0316	0.0358	0.0374	0.0510	0.0325	0.0125
Probable errors of general averages.	0.0087	0.0117	0.0097	0.0108	0.0066	0.0069	0.0061	0.0066	0.0075	0.0078	0.0106	0.0068	0.0026

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